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1841





PRACTICAL REMARKS

ON

THE DISEASES OF THE SKIN,

ON THE

EXTERNAL SIGNS OF DISORDER,

AND ON THE

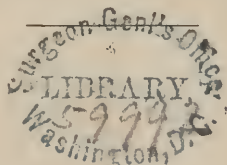
CONSTITUTIONAL PECULIARITIES

DURING

INFANCY AND CHILDHOOD.

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CLASSIFICATION

ACCORDING TO CHARACTER.

PAPULA—PIMPLE.

A small rose-coloured acuminate tumour, with or without an inflamed base—not containing extravasated fluid—seldom suppurating—subsiding—or terminating in a film of cuticle.

STROPHULUS.
LICHEN.
PRURIGO.

EXANTHEMA—RASH.

Superficial diffused redness—terminating in exfoliation of cuticle—or in vesication.

ROSEOLA.
ERYTHEMA.
URTICARIA.
RUBEOLA.
SCARLATINA.
ERYSIPELAS.
PERNIO.

VESICULA—VESICLE.

Semi-globular elevation of cuticle, containing lymph—with a faint, or a deep rose-coloured base—terminating in laminated exfoliation, or brown crust.

APTHÆ.
MILIARIA.
CRUSTA LACTEA.
ECZEMA.
HERPES.
VARICELLA.
VACCINIA.
VARIOLA.
RUPIA.

PUSTULA—PUSTULE.

Elevation of cuticle, by opaque or purulent fluid, with a base of rose-colour or violet—terminating in a yellow or brown crust.

ECTHYMA.
IMPETIGO.
PORRIGO.
SCABIES.
STYCE.
PUSTULE OF ANTIM. POTASS. TARTR.

BULLA—BLEB.

Elevation of cuticle by introfusion of serous or bloody fluid—terminating in thin crust or superficial ulceration.

PEMPHIGUS.
POMPHOLYX.
ENCAUSIS.
VESICATIO LYTTÆ.

ECCHYMOSIS—EXTRAVASATION.

Extravascular blood, beneath cuticle.

PURPURA.
PETECHIÆ.

SQUAMA—SCALE.

Induration or detached film of cuticle.

EXFOLIATION.
PITYRIASIS.
PSORIASIS.
LEPRA.
ICTHYOSIS.
CLAVUS.
VERRUCA.
ELEPHANTIASIS.

FOLLICULOSA.

Diseased secretion in the follicles.

CRINONES.
VERRUCA FOLLICULARIS.
ACNE.
SYCOSIS.

MACULA—SPOT—STAIN.

Discolouration of skin.

MOLE.
NÆVUS VASCULARIS.
CHLOASMA.
LENTIGO.
EPHELIS.
ICTERITIA.

CHLOROSIS.
ALBINISM.
CYANOSIS.

ULCUS—ULCER.

Sore, with purulent secretion.

PARONYCHIA.
ONYCHIA MALIGNA.
PTERYGION.
NOME.
FURUNCULUS.
RHAGHADES.
INTERTRIGO.
CAUSTIC.

DEBILITAS—ATONY.

ALOPECIA.

SHRIVELLED SKIN.

EPHIDROSIS.

ŒDEMA CELLULARIS.

SYPHILIS.

STRUMA.

ARRANGEMENT ACCORDING TO CAUSES.

Diseases symptomatic chiefly of disorder of the alimentary canal, marked by <i>increased</i> cutaneous action, often by subacute or chronic inflammation.	Occurring during dentition or suckling.	<ul style="list-style-type: none"> Strophulus. Lichen. Prurigo. Crusta lactea, Impetigo.
	Dependent chiefly on gastro-enteric irritation.	<ul style="list-style-type: none"> Roseola. Erythema. Eczema. Urticaria. Erysipelas. Phlegmon. Herpes. Lepra. Psoriasis. Crinones. Verruca follicularis. Acne. Sycosis. Porrigio.
Diseases indicative of debility, marked by <i>languid</i> cutaneous action, often the sequelæ of acute disorder.	Original debility of the system.	<ul style="list-style-type: none"> Pityriasis. Icthyosis. Elephantiasis. Alopecia. Shrivelled skin. Ephidrosis.
	Derangement of the chylopoietic function.	<ul style="list-style-type: none"> Apthæ. Miliaria. Ecthyma. Rupia. Pemphigus. Anthracion. Anthrax. Purpura. Nomé Struma. Onychia maligna. Chloasma.

Diseases consequent to specific infection.	{	Febrile	{	Rubeola.
			{	Scarlatina.
				Varicella.
				Variola.
	{	Non-febrile	{	Vaccinia.
			{	Scabies.
				Syphilides.
Diseases consequent to external and common irritation.	{	{	Encausis.
				Vesication from external irritants.
				Pernio.
				Paronychia.
				Pterygion.
				Verruca.
				Clavus.
				Intertrigo.
			{	Rhagades.
				Condyloma.
Maculæ.	{		{	Nævus vascularis.
				Lentigo.
				Tinge of Argenti Nitras.

PREFACE.

It is the duty of an author, ere he announces his book, to ask himself if its perusal will in any way increase the sum of human happiness. In the conscientious mind, an affirmative answer must ever be given with diffidence.

Admiring as I do the originality of Willan, the splendour of Alibert, and above all, the comprehensiveness of Rayer, whose treatise is a treasure of dermatology, it will be a question why I have presumed to add, while such a profusion of acknowledged learning is before us.

The test of utility in a scientific work will be, not the truth of its arguments alone, but the *facility* with which its precepts may be reduced to *practice*.

In medical literature, a profusion of opinions or arguments detracts from this facility, by too often leaving the adoption of practical modes to the reluctant decision of the reader,—the very profusion thus limiting the sphere of utility. I have therefore endeavoured, here, to improve the remarks in my former work on these subjects; to present a book, not of argument, but of practical precepts, founded on long observation; a volume for reference rather than of elaborate study.

The cutaneous pathology in this treatise essentially regards the diseases as they occur during childhood. The remarks will be, however, equally applicable to those of the adult, with this special observance, that the purity and delicacy of the constitution of the child render it peculiarly susceptible of the influence of remedy, while the contamination of system, and organic change of tissues in the adult, render the discrimination of disease and the value of remedies far more uncertain. This comparison, while it explains the combination and varieties, especially, of skin diseases, leads to one most important truth regarding our treatment—that, in the

child, in which the majority of diseases are symptomatic, a judicious adoption of *internal* treatment will frequently supersede the necessity for those topical modes so important to the adult, in whom, by protracted morbid action, disease becomes, as it were, primary, or a part of the tissue, *reacting* on the system.

I have throughout resisted the temptation to relate a series of illustrative cases, or to adduce formal quotations from other books. This might, indeed, have rendered my own more comprehensive, perhaps more imposing, but, I presume to think, less useful than this treatise, in which is blended the experience of others, with practical *deductions* from my own note-books, and from clinical observations at the Royal Infirmary. I will not, therefore, apologise for the plan which I have adopted, although I am sensible of the imperfection of its construction—a fault, indeed, inherent in all systems, except those of demonstrative science.

Stamford Street, Blackfriars,
October, 1837.

PRACTICAL REMARKS

ON THE

DISEASES OF THE SKIN.

ON THE CONSTITUTION OF INFANTS.

The study of infantile pathology is replete with tender interest and instruction; whether we regard the helplessness of the earliest spring-time of human life, or reflect on the comparative mortality of childhood.

When the physiologist begins to explain the phenomena of organic life, he selects the animal in which the organisation is the most simple; so the constitutions of young children are the most favourable for the study of disease, because they are usually marked by greater simplicity, unmodified by alarm regarding the result of their disease, or by sexual influence, or by mental emotion or disquietude, or by the physical changes resulting from the wear and tear of body. They are, above all, uninfluenced by the alterations of structure produced by repeated and varied disease; for acute attacks, if not checked very early, soon disorganise and change the normal condition of some important organs, forming thus what is termed "a weak or delicate point;" becoming often, in after life, the focus or seat of disease.

There is, therefore, a greater uniformity in the symptoms of children than in those of the adult; their pathology is uncomplicated.

The system of the child is capable of constant modification; hence is it so often in our power to mould and educate the body, to impart to it that degree of physical perfection at which the standard of health, as well as the requisites of beauty, will be found,—to avert *early* disease, so often the great spring and foundation of idleness and immorality.

But in this early period of life there is a predisposition to disease in an eminent degree; arising from the peculiarity of infantile physiology, and the sudden changes of condition.

The vascular and nervous systems are acutely sensible of impressions, indicated by a convulsive tendency, "*laxité vibratile*."

The heart is soft, possessing little power, but extreme irritability; its left or arterial side being, relatively, of large size. The course of circulation is undergoing a metamorphosis in the foramen ovale, the arterial and venous ducts, and the umbilical and portal veins.

Corresponding with this, we notice the extreme celerity of the pulse and the breathing, the infant pulse varying from 100 to 130, the breathing being usually 35 inspirations in the minute; while in the adult the healthy pulse is 75, and the breathing 18 or 20 within the same period.

The bright pink hue, or blush, of the skin, too, is a proof of arterial excitability.

The brain and ganglionic masses are large in early infancy, and the nervous system is highly impressible; a property so constantly illustrated by the facility with which crying and laughter are excited, and by the rapidity with which depression and exhaustion take place. As life advances, the cerebro-spinal system predominates, and diseases of irritation are more characterised by tetanic convulsion. From these peculiarities we may explain the very sudden changes of infantile disease, the rapidity with which the membrane of croup is formed—I may almost say *organised*,—and that almost instantaneous effusion of fluid in the cerebral cavities, the water stroke.

The majority of infantile diseases bear an inflammatory character of a certain degree. I believe they are seldom attacked by neuralgic disorder, and that the pain from abdominal pressure is almost always an indication of chronic or subacute inflammatory action within the bowels, for the mucous membranes are the first to take on excessive action. There are, however, no membranes so readily prone *to cure themselves* as these, by the pouring out of their natural secretion, so that in slight cases our interference is scarcely called for.

I believe, too, (in opposition to the opinion of Underwood,) that this copious flow from the mucous membranes, as well as the excessive glandular secretion, driving and wetness of the skin, are salutary provisions to remedy this inflammatory tendency. To furnish these copious secretions, there is a corresponding capacity of the liver and other secreting glands of the body.

Some of the most severe infantile disorders attacking an enfeebled frame are those which are symptomatic, or secondary; as affections of the head in pertussis, bronchitis, pneumonia, and scarlatina; of the chest, in measles, &c. &c.; and all disorders, primary or secondary, are of course modified by hereditary taint in the constitution.

In addition to natural causes of disorder, the system is now first

exposed to the influence of *external* agents, as the vicissitudes of temperature, &c. &c. Above all, the alimentary canal has suddenly imposed on it the duty of assimilating the ingesta for the nutrition and growth of the body.

It cannot undergo these influences with impunity. I believe many deaths occur in infants, during the first year, from exposure to cold air, their power of generating heat being very limited. This is, indeed, proved by the records of the *Hopital des Enfants* in Paris, and other establishments.

Then the digestive power is not always immediately equal to its high office. Aliment does not on its first introduction always prove congenial; indeed, the early process of digestion is a sort of struggle between the power of the stomach and the ingesta.

Another source of disorder is the retention of meconium. Nature herself, however, has imparted to the maternal milk, for a short period after birth, a property which is influential over the evacuation of the meconium; it will sometimes, however, adhere to the mucous coat for many days, and, unless dislodged by purgatives, become acrid and irritating, altering the nutritious quality of the milk, and producing gripings and fever, and even death.

Dentition, also, is often accompanied by a variety of morbid effects; it may be calculated that the *fatal* result from this process (*i. e.* as regards the *milk teething*) is in the proportion of about 1 in 15. Teething may be considered detrimental in the ratio of the integrity or derangement of the functions, especially those of the alimentary canal; and it is materially influenced by the congenital nature of the constitution. It will proceed unfavourably, for instance, in the *strumous* diathesis, especially where its intensity is strongly marked by external signs; as deficiency of cranial ossification, enlarged ends of the cylindrical bones, or spina bifida, and chronic hydrocephalus, and hare-lip. During this period, the condition of the vessels about the head is more active than before, evincing this excitement either by transient flushes, or more constant increase of heat and fulness. Indeed, general excitement, or erethism, or fever of a mild form, are always produced by teething: under favourable conditions, however, it will continue mild, and readily subside. But if the child be unhealthy, this fever will increase, assume the remittent form, and will fix on some delicate organ peculiarly predisposed, thus becoming local inflammation. The most frequent of these severe affections is meningitis, or inflammation of the membranes of the brain, or venous congestion, terminating in partial paralysis or paresis, in convulsion, or in hydrocephalus. To relieve this disturbance, nature appears to adopt three modes of counteraction, driveling, diarrhœa, and eruptions on the skin; the two latter, when in excess and uncontrolled, becoming disease, but within certain limits, remedy.

The inquiry into the morbid influence of dentition, especially as regards the question as to its primary action on the bowels or the brain, is most interesting.

The functions of these are often simultaneously affected; they are not, however, dependent on each other. The brain may be the seat of disorder, and the condition of the bowels still remain little influenced; but in all severe affections of the bowels, the brain will surely, sooner or later, participate. Convulsion, so prominent a symptom in infantile disorders, so constantly the precursor of a death, points to the importance of cerebral pathology in our study. It is a question, however, not easily answered, by what influence, direct or remote, this cerebral disorder and its convulsion are induced; for it will result both from *plethora* or *exhaustion*, and during complete constipation or profuse diarrhœa. There may be an immediate influence, communicated from the dental nerves through the medium of the *corda tympani*, or other nervous fibrillæ, to the brain, or inflammation may be set up by congestion in the veins leading from the sinuses, which may terminate in effusion, as we know that mesenteric tumours will soon produce excessive renal secretion from their obstruction to blood in the venous trunks. Leaving these questions, however, as interesting materials for thinking, I merely point to the pathology of the brain as the most important in regard to dentition, as it is indeed in all the acute disorders of childhood.

ON THE EXTERNAL SIGNS OF INTERNAL DISORDER.

Happily as there is this susceptibility to disease, so is the early and scientific treatment of infantile disorder usually satisfactory, the rallying power being very efficient. The healthy body is in a constant state of renovation and increase, and the constitution itself will often seem to effect a miracle of reanimation. Even at the point of collapse, if the acute symptoms are removed, the child will soon rally and experience a rapid convalescence.

To effect or aid this renovation, however, we should watch the earliest developement of the seeds of infantile disease. Although the important moment is almost always concealed from us, there is a point (if our vision or our wisdom were sufficiently acute to discern or comprehend) at which this worm in the bud might be destroyed. But the signs of incipient disorder are both common and insidious, and therefore liable to be disregarded.

I have endeavoured, in this section, to direct the attention to some of those appearances or actions which are the usual premonitory signs or indications of infantile disorder. There are some so obvious as scarcely to require comment. The saffron tinge of the skin, and the anasarous effusion in hepatic disorder, the livid hue in cachexia, the glandular tumours of struma, the atrophy and non-resistance of the abdominal muscles, and, consequently, tumid belly, in marasmus, and the venous congestion from compression of the vascular trunks; I therefore leave these to pass on to others more intricate and minute.

In the study of the internal diseases of children, we must adopt other modes of investigation than those which relate to the maladies of the adult, who is capable of expressing sensations by articulate words; expressions which, from the imperfection of language, and the adoption of figurative terms, are not always so decisive and illustrative as we think.

The instinctive language of complaint during pain, the expression of feature, and the attitude and action of the limbs, will be, if skilfully interpreted, far less fallible guides. They are the modes of instinct, the expressions of nature herself, which can never impart erroneous ideas, were we not deficient in the power of correct interpretation.

EXPRESSION OF FEATURE.

As the features are physiognomically the index of the mind, so are they, physically, the earliest indication of unhealthy changes.

The pupil of the eye of an infant is, in a state of health, usually *dilated*, from the quantity of the pigmentum of the choroid. Its alterations, however, are very frequent. When the dilatation or contraction is *permanent*, it is a condition of more importance. The fixed *dilatation* of the pupil, if accompanied by a livid hue, and flaccid condition of the face, is often the indication of effusion on the brain.

In the progress of hooping-cough, the eye should be attentively regarded. While the disease is confined to the organs of breathing, the eye will be little influenced, except in the redness subsequent to a paroxysm of cough; but we may almost decide if the brain be about to participate, according to the *fixed* contraction or dilatation of the pupil.

Strabismus suddenly taking place, in connection with other symptoms, is an indication of danger. Its *gradual* and *unattended* progress may arise from mere irritation from worms or other slight disorders of the bowels, or from rays of light constantly falling on the eye from one direction.

Contraction of the pupil to a minute point, with the eye half closed, a red, streaked condition of the conjunctiva, with frowning or knitting of the brows, with spasm of the muscles of the globe; this combination unequivocally marks that condition which will rapidly become inflammation of the membranes of the brain, the first stage of *acute hydrocephalus*. The spasm of the globe, I believe, indicates the presence of arachnitis, and that about the base of the brain.

I may remark, however, that the pupil is often minutely contracted during the sleep of a healthy infant, and rapidly dilates on its awaking.

When the eyeball is fixed and drawn up under the lid, the pupil widely dilating and contracting, the eye being bright and glassy, we may often anticipate, if not averted, convulsion or infantile epilepsy.

If, on exposure to light, the *same* apparent effect is not produced in both eyes, one pupil being fixed and the other contracting, I should consider that danger was present.

A sinking of the globe of the eye, its orbital circles becoming dark, is the effect of rapid absorption, being soon marked by extreme prostration.

Any peculiar movement about the nose and lips indicates disorder about the chest and abdomen.

If there be impediment to the transmission of air through the lungs, the nose will be drawn in during respiration; the mouth being unusually open, and the lips often puckered, and of a livid hue.

When the nose and upper lip are tumefied, there is irritation of the bowels, probably arising from the presence of worms.

If the inside of the nose be dry, and the lips pale and cracked, our attention should be immediately paid to the condition of the head. And when we see frequent spasm of the lower jaw, we may then anticipate that the base of the brain is threatened.¹

EXPRESSION OR MOVEMENT OF THE LIMBS.

Children in a state of health exert their moving powers indiscriminately, seldom employing any exclusive action; they will spring, roll the arms, kick, crawl, in all the variety of antic display.

In considering the movements of the limbs as a series of symptoms, we must not essentially determine the part unusually acting to be the seat of disease; it may be the result of remote sympathy.

If any particular movement be suddenly observed, it is probably to relieve the stretching and pain of irritated or inflamed parts.

There is in pleuritis, for instance, often a doubling up of the body to relieve tension, and the legs are *forcibly* drawn up towards the belly, when inflammation of the serous or mucous membranes of the lower bowels is present. If *one* limb, however, is unusually quiet, or is moved by sudden jerks, that is probably the *seat* of pain.

There are two conditions of the limbs which indicate disorder:—first, an excess of action, spasm; secondly, a loss of power, paralysis,—depending on peculiar irritation of the nervous system from a variety of causes. The simplest form of spasm is starting in sleep.

As early as the fifth or sixth day, infants will sometimes be attacked by spasms in the muscles of the face, lower jaw, or neck, and in severe cases we have seen the jaw completely fixed. This is often, I believe, the effect of retention of meconium, or extending ulceration of the umbilical cord.

¹ Jadelot has adopted three principal traits in his Physiognomic Semeiology:—

1. Oculo-zygomatic, connected with disorders of the cerebro-nervous system.

2. Nasal, with abdominal derangement.

3. Labial, with disorders of the organs of circulation and respiration.

Convulsion will arise also from painful dentition, when it is often attended by swelling of the head and feet, from acidity in the bowels, and the effort to throw out eruptive diseases on the skin. The legs are then often rigidly extended during sleep, these effects subsiding when the eruption has appeared. A contraction of the thumbs, fingers, and toes (carpo-pædal spasm) is often the premonitory sign of more severe convulsion, and opisthotonos, the attendant of that form of cerebral irritation marked by *crowing*.

Paralysis is the reverse of this, and is most frequent in children of a lax and feeble frame, and is usually accompanied by wasting and coldness of the limb. It will occur during dentition, or gastric irritation, or at the decline of fever.

Hemiplegia and paraplegia are depending on more important causes, in the brain or spinal marrow.

In older children, an uplifted step, or staggering gait, and a rocking of the legs, often indicate that species of hydrocephalus which occurs without *acute* disorder; and if they waver much from side to side, the medulla oblongata is usually affected.

Partial paralysis, or paresis, is not an uncommon symptom during dentition, usually affecting one leg only. Although the limb will be diminished in temperature, and hanging, as it were, powerless, it will usually, after a while, regain its power.

EXPRESSION OR LANGUAGE OF COMPLAINT DURING PAIN.

The expression of complaint by mere simple sounds may be *voluntary*,—a natural effort to relieve; or *involuntary*, depending on morbid changes in the organs of respiration, such as the whistling of croup.

Weeping, is the expression of mental sympathy or grief.

Crying, though sometimes an indication of severe pain, is also an involuntary mode of relief. The first natural effort of the infant is crying, until the action of breathing is established. By it the air-cells are distended, and free circulation ensues; an action as essential to the health of an infant as locomotive exercise to the adult. In the system of the child an excited condition often occurs—an accumulated irritability. For its dissipation, crying is useful. As in the adult the suppression of grief and tears is often deleterious, so in the infant congestions would more frequently occur, were it not for this mode of relief.

Fretting. An infant will never fret unless it be uneasy. It may be the mere sensation of fatigue, sleep being usually preceded by fretting; or it may arise from mechanical irritants, as bandages, or pins, or from repletion and distention of the stomach. Fretfulness *continued* often marks the commencement of disorder, when there is *time* for the employment of remedy. If, however, fretfulness be combined with a frequent disposition to doze, or to short sleep, from which the child starts suddenly on the slightest motion or noise, there should be no delay. The same observation will

apply also to those conditions which are marked by rapid changes, in which children become *suddenly* silent in the midst of a whining cry; the answer which they make to a question, "If anything hurts them," being in an indifferent tone, "No," or "Yes," an answer dictated by peevishness, and often opposed to truth.

Screaming is a violent effort, indicating vigour, and is usually heard in the early or acute period of disease. The face is flushed and the veins turgid, as the effort impedes the return of blood from the head. When it is protracted, becomes shrill and piercing, and the heat of skin is increased, inflammatory action has probably commenced.

In inflammation of the gum *breaking* dentition, &c., the scream will be more or less protracted; but in inflammation of the chest and belly, in which are seated the organs of breathing, the effort of screaming, induced by continual suffering, so much increases pain, that the child controls for some moments its expression—the screaming is by *fits and starts*.

Local symptoms will direct us to the seat of pain. Intolerance of light and tossing of the head, to the brain; quick breathing, or panting, or cough, to the lungs; palpitation, to the heart; constipation or diarrhœa, to the bowels; nausea, to the stomach; and crowing, to the larynx.

Moaning is the most important and threatening language of complaint, being that of suffering with *weakness* or depression, which renders inflammatory disease so difficult to treat.

During painful dentition, children moan and grind their teeth at intervals; in acute disease the moaning is *continued* at each respiration. When after violent and shrill screaming the infant is suddenly affected with extreme languor and stupor, accompanied by dull moaning, such an apparent quietude is the very reverse of flattering. Moaning is peculiarly characteristic of disease in the stomach and bowels, especially if the body be bent or the legs drawn up; but if deep sighs precede the moaning, the child speaking with a nasal tone, and leaving sentences half expressed, there is then usually a tendency to cerebral effusion.

PECULIARITIES OF RESPIRATION.

Closely allied to the "language of complaint" are the morbid modifications of respiration.

Dyspnœa, in various degrees, is not uncommonly produced by mechanical pressure of enlarged glands, as the submaxillary or cervical chain, and sometimes the thymus. To distinguish this from real bronchial disease is most important.

The most formidable change from healthy breathing is that sound which has been denominated *crowing*, *chronic* or *cerebral croup*, and by Dr. Ley, "*Laryngismus stridulus*;" so closely resembling the whistling sound in cynanche trachealis, but so widely differing from it in its nature and its cause.

The disorder consists in a spasm of the muscles of the glottis, and the sound arises from a violent effort to open the laryngeal constriction, as mere crying is to open the air cells of the lung. It is possible that the pressure of a gland on the recurrent nerves may sometimes produce this, and often very suddenly by a rapid rush of blood into the gland; but it is most usually arising from cerebral irritation. This crowing, although often stealing on most insidiously, may be merely transient, spontaneously subsiding, and the child almost instantaneously becoming well. When it is more severe, or frequently recurring, it is attended by much danger, and is often indicative of tubercular meningitis.

I may add, that when a cough assumes the *spasmodic* character, it is usually a mark of cerebral affection, as cough with *mucous expectoration* is of pulmonary or bronchial, and a dry and *irritative* cough of gastric disorder.

ON THE DISEASES OF THE SKIN.

INTRODUCTION.

Sydenham has observed, "a disease is no more than a vigorous effort of nature to throw off morbid matter, and thus recover the patient." Without adopting implicitly the principles of humoral pathology, there are few more apt illustrations of this aphorism of Sydenham than diseases of the skin.

In variola and measles, for instance, how acute are often the symptoms before the eruption is thrown out to the surface of the body. The specific exanthemata may be adduced as prominent examples of the *constitutional* nature and origin of disease. The rash is merely the outward sign of internal disturbance, so that the term symptomatic may be equally applicable to the eruption as to the fever, for the fever may occur *without* the efflorescence. For instance, the nurses of scarlatina patients who have once been the subject of that disease, will often have an attack of the characteristic fever and sore throat, but without the slightest efflorescence on the skin.

Of how great importance, then, are those emunctories of the body that form the principal channels through which this vis medicatrix are directed, by which foreign and injurious matters are eliminated from the mass of fluids.

The healthy process of secretion, properly so called, the separation of alkaline fluids from the blood, is one so essential, that the slightest obstruction to the duct of a gland is often productive of a

train of symptoms, varying in intensity according to the relative importance of the secretion itself to the animal economy.

Among the true excretions of the body, the evacuation of which from the system is of such immediate necessity, we may consider the fluid of perspiration as not the least important; especially when we reflect on the immense load of which the circulating mass is relieved by its constant transudation in a state of health. This important function cannot properly be carried on without the integrity of those tissues which secrete the fluid, and through which it transudes—the cutis and the cuticle. Its suppression or obstruction, if a mere functional deficiency, may be productive of dangerous visceral engorgement, and of disease in many internal tissues of most acute character: we may easily anticipate, therefore, the evils, direct and indirect, which arise from some of those more permanent alterations of structure, *the diseases of the skin*.

If we consider, for a moment, the anatomy and physiology of the skin, its sympathy, so to speak, with the mucous surface of the alimentary canal, and the apparatus of the pulmonary and renal functions, its relative importance will be at once confessed.

The bowels are disordered in skin diseases oftener than many pathologists allow, especially when eruptions on the skin are spontaneously subsiding. Hence the importance of restoring their functions, not by Morrisonian purgatives, but by a judicious course of alteratives and vegetable tonics. So, also, muco-enteritis will sometimes keep up disease of the skin, as a natural effort to restore.

The morbid conditions and deranged secretions of the bowels and kidneys may thus, in reference to skin disease, be considered very often as cause and effect, and, perhaps, this conclusion may explain the *modus operandi*, or, at least, the efficacy of *alkaline* remedies in cutaneous disorders, especially during the period of childhood, by improving the quantity and quality of the renal secretion, which, in skin diseases, are so often unhealthy, and by removing acidity from the bowels. *In the *lithic diathesis*, the skin is generally diseased. Indeed, the skin is an indicator of almost all diseases during the infantile period. Examine, too, its texture and its tint, and we shall often discover, if not the internal disease itself, at least its character or degree, whether it be inflammatory or adynamic, &c. The skin, and the extreme portions of the internal membranes of the alimentary canal, must be regarded, indeed, as one continuous membrane, the epithelium that lines these portions being a reflection of the cuticle. It is true that the structure of the skin is far more complex than the mucous lining,—consisting of three separate laminæ or tunics, of vessels of inhalation and exhalation, of those formed for the secretion of mucus, of colouring matter, of horns, of hairs, of nails, of scales, and of the nervous papillæ, or the organ of touch;—still there is so intimate a resemblance in their superficial coat, that they may, in a degree, be mutually converted into each other: permanent or long-continued foldings of the skin, taking on the secretion of a lubricating

fluid, and constant exposure to the action of atmospheric air, as in prolapsus, converting the inner surface of the uterus or rectum into a dry cuticular tegument. Many of the exanthemata, as scarlatina, rubeola, &c., attack both tissues simultaneously, the epithelium, as the cuticle, being subject to its characteristic exfoliation. We have, also, erythematous inflammation of the mucous lining throughout the whole course of the canal, and eruptions which resemble those of the skin as nearly as the tissues will allow; vesicles, of course, only occurring where an epithelium or internal cuticle exists.

We cannot be too often reminded of the importance of the study of cause and effect in reference to the diseases of the skin,—of the danger resulting from the treatment founded on superficial theories, and especially from the prevalence of self-experiment.

From a volume of examples I will merely make a brief selection.

Severe diseases may be often produced by the means of cure adopted for others of milder degree. This may be termed *forced* metastasis, in contradistinction to the *voluntary* metastasis, of which we have so frequent an example in rheumatism, ophthalmia, and otirrhœa.

Where a simple local disease has existed for a long period, it becomes, as it were, essential to the constitution—the outlet of anything noxious to the system: of this nature we may consider chronic ulcers, which are, indeed, natural issues. On the sudden healing of these sores, (even spontaneously,) constitutional derangement will often take place, which as usually disappears on the reproduction of the ulcer or the establishment of an artificial fontanel. As a proof that the system avails itself of these drains for the dislodgement of that which might prove deleterious by its retention, I may mention that condition of ulcer, the menstrual sore, bearing the character of a common purulent ulcer, except at the customary periods of the catamenial flow, when its secretion becomes sanguineous or tinged with the dark red colour of the menses; on their cessation, again assuming its former purulent appearance. The rationale of this fact is this,—that on the establishment of these drains, some of the natural and healthy secretions become gradually diminished in quantity; the glands which perform the function of these secretions having been long accustomed to a relaxation from their full duty, will not be in a capacity suddenly to exert an increase of power equivalent to the necessity; thus the system becomes oppressed by some retention, and disease may ensue.

As congestions take place from the prevention of perspiration and other secretions, so then will morbid effects ensue from the sudden *repulsion* of eruptions from the surface. More than once have I regretted the *local* success of applications to the crusts of porrigo, the removal of which has been speedily followed by acute ophthalmia, which, without great care, would have proceeded to the rapid disorganisation of the globe; and we may often trace the still more important disease, meningitis, and its frequent conse-

quence, the effusion of serum into the cerebral cavities, to the merely local treatment of purulent crusts.

My learned colleague, Dr. Copland, has reported to me, among others, a case to which he was called in consultation of alarming phrenitis, produced by the application of a cold lotion to an erysipelatous affection of the face, and I have seen amaurosis and convulsion arising from the employment of such a mode. Dr. Merriam relates a case of stupor ending in death, from a somewhat similar cause; and Dr. Morton has alluded to several cases of meningitis in children, arising from the spontaneous recession of porrigo. I may add, that I have often seen these diseases alternating.

Dr. Darwin has presented us with two cases of chorea, and one of hepatic disease, immediately succeeding the cure of scabies: indeed, there seems to be something peculiar in this disease, in regard to repulsion, when it has long existed. Paralysis and mania have resulted from its sudden cure, and Mr. Wilson relates a case in which melancholia occurred during the progressive disappearance of this disease, which symptoms of depression were removed by an issue.

From the recession of the specific exanthemata, as rubeola and scarlatina, we have often an aggravation of the febrile symptoms, and dangerous congestion and inflammation of a vital organ—the membranes of the intestines, of the lungs, and of the brain.

From these facts we may judge, by analogy, that skin diseases are often prophylactic on the principle of counteraction and metastasis. We have seen several cases of dyspepsia immediately relieved by a crop of urticaria. There are cases related by Pugol, of hypochondria yielding to furfuraceous scales; by Gale, of hydrocephalus relieved by purulent incrustations; by Bracet, of phthisis cured by the eruption of small pox; and by Andral of pneumonia, and by Mead of ague, yielding also to variola.

The vesicles of lichen, of acne rosacea, and many squamæ, will often, for a time, suspend the gouty character.

The vesication of lytta is a cutaneous *disease*, artificially produced as a *remedy*. Thus the skin itself, which is not a vital organ, becomes a valuable prophylactic of more important and delicate structures.

We often become impatient at the non-success of our treatment in these cases—at the resistance which nature offers to our endeavours. We condemn her as ungrateful and capricious; but how know we if nature does not understand her business best, setting up this resistance because she feels that the remedy will be worse than the disease? The danger, however, of external treatment will be far less when we have previously removed the remote cause. Indeed, the cure of primary and secondary disease is often simultaneously effected.

And here the adoption of one principle in treatment will often relieve us from this dilemma. I mention it here generally, because,

as a preliminary step, it is applicable to almost all cutaneous diseases, especially in childhood, whether common or specific, idiopathic or symptomatic: I allude to local depletion. By subduing common inflammation, which is concomitant with so many even contagious diseases, we produce almost a magical effect, by rendering a disease, before stubbornly resisting, directly yielding to local, and even constitutional remedy; I adduce the case of chancre, in illustration of my remark. Indeed, previous to the employment of medicated baths, the antiphlogistic or depletory plan is usually adopted, as a preparatory step.

As exceptions to these arguments, it is true there are many instances of the sudden recession even of *symptomatic* disease, without the consequence of evil; nay, even a salutary effect has resulted, where, *à priori*, danger would be feared.

The *establishment* of disease on the skin, will sometimes *react* on the system to the detriment of the constitution; and its *extension* to important parts may be destructive. In the course of scarlatina, and measles, and variola, the spreading of the rash or the pock to the air passages, may lay the foundation of phthisis.

It is as essential, then, to know *when* to cure, as *how* to cure.

There has been, doubtless, a peculiar difficulty in the *classification* of diseases of the skin, from Hippocrates, the first cutaneous nosologist, to Rayer, the last and most elaborate.

The skin consists of a set of tissues, predisposed, and subject to a variety of influences. From idiosyncrasy, certain essential or *linear* characters of disease may be closely assimilating—apparently identical—though arising from contrasted causes. Indeed, *two* causes are usually acting together; the internal disorder having raised the predisposition to a certain point, which casual excitement develops.

Erysipelas, though an inflammation *sui generis*, may be idiopathic, or symptomatic, or traumatic, according to its causes; and a simple puncture shall produce in one skin a rose rash; in another, erysipelas; in a third, rapid gangrene, according to this idiosyncrasy.

The knowledge of this peculiarity will render easy of explanation many phenomena, discrepancies, and combinations of disease, that would puzzle and perplex a stranger. It will inform us how certain substances will always produce the same effects in certain constitutions, obnoxious or yielding to them; and how certain specific diseases shall be excited in others by common causes. An illustration of these positions, will be, the appearance of urticaria and eczema, on the swallowing of certain articles of diet, as strawberries, vinegar, and muscles: and the excitement of struma, fungus, or malignant cancer, by a blow.

I may add, that where stimulating applications have been prematurely employed in cases where active inflammation exists, a more copious and *rank* eruption will often be the result, and even where acrid lotions have been too profusely applied, or on parts

not *apparently* diseased, they have excited the very *same* disease in those portions of integument which they were intended to remedy on another. Nor does the mere *linear* resemblance of certain artificial eruptions, as the pustule of tartarized antimony to variola, disprove this position; it rather strengthens the proof that the cuticle, its follicles, and its bulbs, will take on a peculiar, almost similar, action from many excitements.

Another analogy, though not so close, is this:—It has been asserted, that the peculiar secretions in some cutaneous diseases are similar in their nature, the variety of external character depending on idiosyncrasy. The *varieties* of contagious porrigo, for example, may be produced in different individuals by the contact of a secretion from the pustules of one species. This predisposition in certain parts, as gland, or follicle, or papilla, forms the cloaca, or outlet, to which many morbid dispositions in the body are directed. Systematic classification, then, must be modelled, subject to these anomalies and exceptions.

The other source of error is the overlooking, in the course of our definition of appearances, the *primary* for the *secondary* character or stage.

The vesicle of eczema, and the pustule of impetigo, existing on a peculiar tissue, as the scalp, will often produce a crust similar to porrigo, even to the matting of the hair, although by so many deemed characteristic of the latter. The study of primary disease is a most important distinction in practice.

It is a doubt how far the primary form differs from the secondary in its essential nature. If a primary papula were crushed in the bud,—its development checked,—its varied forms would not, of course, appear, and the treatment would be simple. The protæan forms, however, which secondary diseases assume, the papula either spontaneously disappearing, or becoming, successively, a vesicle, a pustule, or a scale, involve the question at what period we should adopt *specific* treatment, if such there be.

In constructing a *practical* system, I would not confine classification according to the *elementary forms* of Plenck, Willan, Bate-man, or Rayer, or the arrangements of Alibert into families, or into natural groups, or according to the pathology of tissues, but, as nearly as possible, in reference to the simple or specific *causes* of disease, rendering the nosological arrangement an epitome of the treatise, by which I may hope to simplify treatment. To take each order or genus in its turn, is, apparently, the most systematic mode of study, if cutaneous disease were a mere object of curiosity, or, from first to last, varying only in degree. But glance at the order of inflammations. Some are specific, others common; some symptomatic, others idiopathic; some are defined according to their degree, others to the tissues on which they are seated; some changing their essential character as they proceed, (the blush of erysipelas, for instance, terminating in a vesicle or bulla,) others on which we ring the changes of terms, according to the comparative importance

of combined disease, as erysipelas impetiginodes, impetigo erysipelatodes, &c. &c.

Then in the order vesiculæ, we have the simple eczema, the contagious scabies, the specific vaccinia, and the simple acne closely associated with variola, and, on the contrary, syphilis, like a very *Protæus*, marked by all the orders.

In allusion to this variety, we have been critically asked by Cazenove and Schedel, "In the present state of our knowledge, is it not a vain and hopeless effort to attempt to group such numerous species according to the causes which produce them?"

I believe not. By combining the classification of *forms* with their graphic delineations as an *alphabet*, so easily learned from the atlas; and the arrangement according to *causes* as a *language*, we shall *concisely* comprehend as much as science at present offers on the subject of cutaneous pathology.

ON DISEASES SYMPTOMATIC CHIEFLY OF DISORDER OF
THE ALIMENTARY CANAL; MARKED BY INCREASED
CUTANEOUS ACTION, AND OFTEN BY SUBACUTE OR
CHRONIC INFLAMMATION.

Diseases occurring during Dentition or Suckling.

STROPHULUS.

Red gum—White gum—Milk spots—Tooth Rash.

An eruption of papulæ, their hue varying from the faintest pink to the brightest crimson.

S. Intertinctus, mild red gum.—Bright red papulæ and minute red points, in irregular patches; sometimes extensively coalescing and becoming more elevated, and often nearly covering the cheek; occasionally fading in a week, or continuing for a month or two. In other cases combined with straw-coloured vesicles, or forming slight superficial ulceration, with very thin filmy crusts if the exudation is allowed to concrete. When of deep colour, and spread over a very extended surface, the eruption is termed rank red gum, or tooth rash.

S. Albidus, white gum.—Minute opaque pearl-coloured spots, irregularly sprinkled; their seat usually the face.

S. Candidus.—Large white opaque papulæ, with very slightly inflamed bases. Often the sequelæ of acute disease, in the infantile state, when they may be considered salutary preventives of chronic disorder or organic changes.

Treatment. As strophulus is usually a salutary effort to relieve the alimentary passages, the treatment should be palliative, unless it proves irritative by its intensity or *rankness*.

Tepid bathing, light clothing, and moderate temperature. Cold bathing must be employed with caution, as indeed in all other infantile diseases. In strong children, a glow on the skin, re-action, usually succeeds the bathing; if it does not, and the papulæ disappear, it will be prejudicial. If this is attended with restlessness, a child should be directly immersed in a bath of 95°, and a few drops of the compound spirit of ammonia administered. If any degree of convulsion should supervene, the camphor liniment should be rubbed on the sternum, or a sinapism for a few minutes on the feet.

It is important that the food should be cautiously administered; that the milk should possess bland and nutritive properties, being of a clear blueish colour.

Carious teeth in the suckling mother or nurse, are sometimes productive of derangement in the digestive functions and the general health of the infant; and I think I have traced the eruption of strophulus of a livid hue to this source: nurses with teeth of this nature are certainly objectionable. Of course, where deranged alimentary functions are the cause of strophulus, the treatment is evident. Castor oil may be given every second or third morning, and, as an alterative, the powder (2) every night for about four nights; then omitting three or four nights, and repeating the same plan.

In cases where much debility exists, the muriatic acid in minute doses, M.j. ad ij.

During the process of dentition, symptoms will be aggravated. This is indicated by the carrying the hand to the mouth, drivelling, a peculiar shrill cry, and the distention and shining redness, or whiteness, of the gum, the temporal arteries throbbing often with more force than the wrist pulse. To relieve all this, free *crucial* incisions should be made down to the crown of the tooth. The head should be in an elevated position, and in severe cases ether water may be applied on folded rag to the forehead; it is sometimes necessary to adopt a decidedly antiphlogistic course, with the application of leeches behind the ear.

If strophulus *frequently recurs* during suckling, it will be judicious to change the nurse.

By constant irritation the health will sometimes be much deranged. Papular clusters of a dark hue will arise in different parts of the body, terminating in brown exfoliations, and marked by febrile symptoms, a brown scabrous state of the skin succeeding, often of long duration. If this be neglected, marasmus often occurs. In this case, the tonic mixture (7) should be combined with the mercurial alterative.

LICHEN

Differs little from strophulus in its causes and its character; the papulæ, however, being paler, firmer, and more pointed: they somewhat resemble a vesicle, but they contain no serous fluid,

although they bleed more than the adjacent skin if pricked. Their *termination* is almost always in desquamation, the cuticle remaining rough or slightly furfuraceous for some time.

I believe lichen to be not so much dependent on dentition as strophulus.

The papulæ of lichen differ from strophulus in the degree of *itching* or *pruritus* attending them. In the latter it is never troublesome, but in lichen it is severe, occasionally inducing fever by irritation.

Treatment. In the slight degree, the citrate of magnesia, or magnesia with lemon juice, in a state of effervescence, combined with the powder (2.)

In the severe form, more decided purgation should be adopted.

If debility exist, or the eruption be livid, the tonic mixture (5.)

In very stubborn cases, I have given minute doses of liq. arsen. (Mij.) in infusion of cascarilla thrice in a day, with advantage.

To allay the itching of the acute form:

℞. Acid. hydrocyan. ʒj. Mist. amygd. ʒvj. Hydr. oxym. gr. j. to be applied by a sponge, thrice in a day.

In the atonic form:—

℞. Liq. ammon. ac. ʒij. Mist. camph. ʒiv. f. Lot.

If chapping of the skin takes place, the following ointment:—

℞. Ol. volat. amygd. amar. ʒj.: U. cetacei ʒij.

In cases of *Lichen circumscriptus*, where the papulæ are set in a circular form on a bright red base, they should be slightly touched twice in a day with aromatic vinegar, on a probe; the powder (3) administered each night, and the simple infusion of cascarilla (sweetened) each morning.

PRURIGO.

Pruritus—Psoris papulosa—Cnesmos.

The pimples are differing little from lichen, yet they are usually less distinct, not so acuminate, and flatter; the itching is of a very intense degree.

It is probable that if pruriginous papulæ were allowed to be free from friction and abrasion, by the muffling of the child's hands, they might exfoliate like strophulus; they do, indeed, sometimes *fade*, leaving a dusky yellow stain; but the child is constantly scratching, especially when extremes of temperature have aggravated the pruritus, and thus abrasion ensues; from which there is an exudation of watery sanies, which, concreting on the surface, forms thin crusts of an umber or black colour; when these drop, a dull crimson mark remains for a time. This is the most favourable termination of the papulæ; but where there is a gross habit, friction will produce superficial ulceration, or a pustule, terminating in the crust of impetigo. In the most aggravated form, (P. formicans,) the itching is intense and incessant, as of insects crawl-

ing over and stinging, or of heated points piercing the skin. Heat increases these sensations, and sometimes white wheals and dark brown crusts are extensively spread over the body; in this state some tumefaction will sometimes occur about the muscles of the arms and legs, impeding their action.

Prurigo is produced chiefly in spring and summer. In most cases there will be a precursory gastrodynia or cephalalgia for many days, indicative of gradual derangement of the digestive functions. In others, it will appear shortly after the swallowing of deteriorated milk, or an excess of common food. In older children, after a copious draught of cold water, or fish when out of season, and fluids that have undergone the acetous fermentation. Repeated doses of castor oil are sometimes the cause.

Treatment.—In mild cases, the warm bath or copious tepid *sponging*, with ℥ss. of the sulphate of potass or ℥j. of lac sulphuris twice in a day. In more severe forms, attended by languor and wasting, an aperient every second morning, the combination of sulphur and soda in infusion of cascarrilla, combined with the bath (⁴).

In older children, if these do not succeed, I would add the solut. min. in minute doses, or the decoction of dulcamara.

In children approaching the adult period, I would somewhat modify the treatment, as follows:—

℞. Pil. hyd. subm. C. gr. iii. ad v. o. n.: Solut. min. ℥ iij. ad v. bis terve indies.: Ac. mur. ℥ij. ad viij. or, Acid. muriat. oxygenat. ℥ xij. ad xx. bis indies ullo. v.

The most prominent papulæ should be touched every second day with aromatic vinegar, or, what is still more efficacious, the hydrochlorate of ammonia.

Occasionally I have used the bath (⁴), the simple solution of the chlorate of lime, and in some cases the following ointment with advantage:—

℞. Sulph. sublim.: Picis liq. a ʒj.: Ammon. hydrosulph. gr. v.: Ungt. cetacei ʒjss. M.

From the belladonna lotion, (Extr. ℥j. aq. dist. ʒij.) I have sometimes gained much alleviation to the pruritus, but it must be watched narrowly, and the state of the pupils frequently examined.

In cases marked by much increase of action, bleeding will be often very beneficial.

It is a principle, indeed, acknowledged, that bleeding often brings the system into a predisposition to be acted on by opium, digitalis, calomel, &c. almost instantaneously. It is after bleeding, too, that I have witnessed the greatest benefit from the sulphureous fumigation, at a temperature of 100°.

It is essential that the sordes, &c. and all previous applications should be constantly removed from the skin ere they be again resorted to; unless this be done, prurigo will often degenerate into impetigo or ecthyma. Perhaps the papular form of scabies may be thus established *de novo*.

In prurigo the itching is remittent, and is very distressing to the patient. In the contagious scabies, the itching has no remission, and the scratching mostly agreeable to the child. In prurigo ointments are usually objectionable, while in scabies, they are the most favourable form of application.

Prurigo is subject to frequent recurrence after it has been apparently cured.

CRUSTA LACTEA.

Impetigo larvalis—Impetigo mucosa—Porrigo lactea—Porrigo larvalis—Lactumen—Tinea muciflua—Teigne muqueuse—Eczema lactea—Milk scall—Infantile rash.

The incipient vesicles of this disease, which frequently accompany strophulus, may desiccate without *breaking*: where, however, the alimentary canal is disturbed by quantity or quality of milk or food, especially if there be added to this the irritation of dentition, the fluid in the vesicles assumes a straw coloured tinge, will often coalesce, and become surrounded by a blush: the viscid fluid escapes, and is inspissated, forming concretions of a whitish yellow or greenish tinge. The crusts lie in laminæ, some overlapping others, or intersected by narrow pink or olive coloured fissures. This process may extend till the face is reduced to one incrustated covering, resembling a mask or larva. It may extend to more remote portions of the skin, although it is usually seated in the vicinity of *mucous orifices*, nor does it necessarily begin, as some suppose, on the scalp.

It will often vary; the discharge will abate, the crusts separate, the inflamed margins become paler, and underneath a thin discoloured cuticle appear, and yet this tendency to health will be suddenly averted by very trifling causes.

The discharge is not offensive, nor does it, when creeping to the tarsal edges, often produce *tinea ciliaris*, the first degree of lippitudo, although epiphora will often occur more from irritation to the lachrymal gland than from any thickening of the membrane of the lachrymal passages. Irritation of the schneiderian membrane will also produce simple coryza.

Induration of the parotid, submaxillary, or cervical glands, will often occur in children with fair hair and thin skin, of languid or strumous diathesis. The disease, however, often occurs in healthy children, or those which have by no means been deficiently fed. If the disease is very extensive or acute, diarrhœa, mesenteric obstruction, and even fatal marasmus may ensue. This disease is usually salutary, unless occurring on important parts, or to an excessive degree.

Treatment.—In the mild form, simply regulating the alimentary secretions by a lighter form of diet; or, perhaps, a change of breast milk and gentle laxatives. The powder ⁽³⁾ each night for a week. The powder ⁽²⁾ each following morning. If the abdomen be tumid, more decided purgation. If the general health suffers, we may

combine the vegetable or mineral tonics—cascarilla, calombo, or tartrate of iron. Locally, the warm water, or thin gruel: the ung. plumb. being applied to the excoriated edges. When the inflammatory character has subsided, the ointment (2). If the crust be very dry they should be touched with cream, or ol. amygd., with a few drops of liq. potassæ. If they are extremely moist (which by contact might add to the excoriation) sulphur prec., or starch powder, lightly strewed over the crusts.

By the severe forms even of this disease, no permanent marks will be left.

IMPETIGO.

Psydracia—Dartre crustacée flavescence—Crusted tetter—Pustular or humid tetter—Scall.

An incrustation of an umber, sienna brown, or olive colour, appearing either in defined patches, (*figurata*), or diffused over the surface, (*sparsa*.)

The incipient psydracious pustules of impetigo appear either on an inflamed surface of two or four days' duration, or in clusters with a defined inflammatory margin, accompanied by heat and smarting, in proportion to extent and intensity of action. The pustules are slightly elevated; in two or three days the purulent secretion bursts the cuticle; the part then becomes red and shining, and exhibits often a cribriform appearance, the pus being evacuated through several minute orifices. If the pustules have arisen in clusters, the inspissated crust is speedily formed, and from beneath it an ichorous fluid is constantly oozing. Fresh pustules will often appear about the edges of the crusts, either disappearing early under the already influential treatment, or assuming a chronic and scattered form.

By neglect or maltreatment the disease may extend until the whole limb is incased in one rugose covering—I. scabida. The crust will then assume a grayish brown colour, surrounded by a lake coloured margin. This form is attended by much heat and itching, and by impediment or complete obstruction to the motion of the limb. After some time the coating is permeated by deep fissures, through which the matter continues to exude, adding layers of incrustation on the previous coat; extending to the extremities, it will produce ulceration of a purple hue around the matrix of the nail, which often drops off, and is succeeded by another, misshapen, from the diseased function of the gland.

The surrounding erythematous inflammation will sometimes become aggravated, producing slight vesications, (impetigo erysipelatoides of Willan,) and this may extend deeply into the cellular membrane—a disease of great severity.

The period of the separation of the crusts will vary from two to four or five weeks; this, however, may be hastened by warm water or poultices. The healing process commences usually in

the centre, and radiates towards the circumference. On the dull crimson patches beneath the crusts, small elevated spots, apparently vesicular, sometimes occur; they are, however, indurated follicles.

Impetigo is often combined with other forms of disease. Eczematous vesicles are often interspersed, (eczema impetiginodes,) which are attended by little redness, but by extreme irritation, heat, and itching.

It is of some moment that we should distinguish the incipient character of these pustules and crusts, two genera of the order being contagious; viz.—porrigo and scabies. The incrustations of impetigo are more circular, thinner, browner, and less adherent than those of porrigo, and occurring much more on the extremities, and being of slower inspissation: the *fluid* of porrigo, too, being purulent and glutinous, that of impetigo generally *ichorous*. The interspersion of vesicles produces a resemblance to lymphatic scabies, but the vesicles of impetigo are more slow in their progress, the sensation is more heat and smarting than itching, the cuticle redder and more fissured, and the ichorous exudation more copious than in scabies.

Treatment.—In mild cases, adoption of the lightest aliment. The mercurial purgative every second morning. The sulphate of potass, or the precipitated sulphur, twice in a day.

If we are consulted ere the pustule has advanced to maturation, one drop of acet. aromat., on lint, or a saturated solution of lunar caustic, should be applied. In the incipient stage of mild cases, the most soothing applications are tepid water, thin gruel, a weak decoction of poppies, or a light moist bread poultice. In a more acute or inflammatory state, bleeding by leeches or venesection will be essential, minute doses of tartarised antimony, and in case of much irritation, a few drops of the Tr. hyoscyami given in lemonade twice or thrice in a day. If on the subsidence of inflammation the healing process is slow, it may often be aided by the lotions (¹) or (⁶), or the white precipitate ointment. In more protracted cases, the alkaline, or sulphureo-gelatinous bath should be employed, or a lotion composed of acid. hydrocyan. ℥j., alcohol ℥j., aq. ros. ℥ij.; or one composed of potassæ sulphuret. ℥ij., aq. ros. ℥iv., and from five to ten grains of sulphuret of potass, may be given in milk twice in a day, with the occasional use of hydr. cum cret.

According to the degree of debility, the infusions of sarsaparilla, cascarilla, calombo, or dulcamara, may be given with the muriatic acid, and syrup of orange peel. During low atmospheric temperature, oiled silk should be worn on the crusted parts, to protect from cold and friction, and to soften the incrustations.

The internal use of the dento-ioduret of mercury produces vesicles, followed by yellow or yellowish-green scaly crusts, easily mistaken for those of porrigo and impetigo.

DISEASES DEPENDENT CHIEFLY ON GASTRO-ENTERIC IRRITATION.

The four following forms of eruption assimilate closely with regard to causes; the *variety* being produced by the constitutional predisposition, although there *are* causes peculiar to each. External irritants will produce erythema. The pustules of variola and vaccinia will excite roseola, which may in some cases become so severe as to terminate fatally. Mercury will be followed by a crop of eczema, and urticaria will rapidly appear on the administration of acids.

ROSEOLA.

Rose rash—Rash—False measles—Rosy efflorescence—Rubeola sine catarrho.

An efflorescence of a bright rose colour diffused, or in patches on a fainter ground of pink, sometimes assuming a serpentine form resembling measles, from which it may be distinguished by its brighter hue, as also from scarlatina simplex by the slight erethism merely, which attends it.

In the hotter months, the efflorescence is usually in the form of dull crimson or lake patches, of a circular or oval shape, and sometimes a redder circle is formed around the patch—Roseola annulata.

In the adult, roseola will sometimes be formed during acute febrile diseases.

There is usually a premonitory languor and headache on the eve of these eruptions; this usually subsides, or is much alleviated, on the outbreak of the rash.

ERYTHEMA.

Efflorescence—Maculæ volatiæ.

A diffused, blotched, or papular redness of skin, in the form of dull crimson patches, chiefly on the breast, neck, or arms, disappearing on pressure. It is usually transient, although it will sometimes be more severe, extending over a whole limb, and accompanied by œdematous swelling. It is often interspersed with distinct papulæ, (eryth. papulatum,) attended by depression and quick pulse, and assumes a livid hue on its decline. It is also in some assuming the form of rose-coloured tubercular lumps, (eryth. tuberculatum,) or of a raised indurated efflorescence, attended by more heat and febrile symptoms. In young females, the fore part of the leg is sometimes studded with large rose-coloured oval patches, (eryth. nodosum,) attended by much pain and erethism: this fades and becomes dusky, disappearing in about a week; it is depending on sympathetic action with the changes of the uterine system.

Although these rashes may be produced by external irritation, or the sign of deeper seated fascial disease, they are almost invariably depending on irritation of the primæ viæ; certain articles of diet,

especially unwholesome breast milk, and certain medicines, will, in some, suddenly produce them—as arrow root, rhubarb, balsam of copaiba, &c.; the rash is then of transient duration.

In more slowly formed intestinal disorder it is more permanent and more severe, and yet an alleviation of the primary derangement. In very languid or unhealthy constitutions I have seen the efflorescence of a very deep crimson hue, or a dull, dark purple, and marked by typhoid symptoms, indicating a cachectic condition of the system; and I may here remark of how much value is the *hue* of an eruption in regard to prognosis, and especially to treatment; the bright efflorescence requiring the laxative and antiphlogistic, the livid demanding, in addition to the mildly laxative, the tonic plan of treatment.

It is needless to offer a prolix catalogue of remedies for these various forms of efflorescence. In the lighter forms, gentle aperients, preceded by a mild emetic of ipecacuanha, will be proper; and we should of course remember to remove the exciting cause, if possible: lancing the gums, if swollen and hot; changing the articles of diet; regulating the temperature; and keeping the patient quiet, and free from excitement.

If there is fever, sudorifics, the powder ⁽²⁾ each night—the mixture ⁽⁷⁾. On the subsidence of the disorder, slight tonics, as the mixture ⁽⁵⁾; and in cases of languid circulation, especially in cachectic habits, where the livid hue is observed, the powder ⁽⁶⁾ may be added. Barley water, with lemon-juice, as the common beverage.

With regard to external treatment, tepid water or thin grit gruel, or, what often affords very great relief from itching, or heat, or pain, a sprinkling of starch powder. These modes of treatment will usually prevent even the severer forms from degenerating into gangrenous sores, or oozing fissures.

ECZEMA.

Prickly heat—Hydrargyria.

Eczema usually appears in children in the form of small pearl-coloured or brownish-pink vesicles, with a very light rose-coloured base, preceded by a sense of heat or tingling. When these are seated between the fingers, especially if aggravated by scratching, it may be mistaken for scabies; but the suddenness of eruption, the more pointed vesicle, and the sensation of smarting rather than itching, readily distinguish it from scabies.

Eczema may quickly subside, almost without desquamation, the lymph of the vesicle becoming opaque, and then being absorbed; in other cases, a brownish scab will form, leaving the skin in a rugose state, and (if this becomes aggravated) producing febrile symptoms and deranged health, from irritation.

Mercury, and indeed cubebs, in some instances, will (perhaps by deranging the stomach) be followed by a crop of vesicles on a light

vermilion ground, (*Ec. rubrum*.) In these cases we often see a reddish-brown patch, after a short time, with a defined margin, interspersed occasionally with pustules. When the disease is spreading over the hand we have known so extensive a desquamation of the cuticle, that it has peeled off from the hand like a glove. Its seat appears to be the cuticular follicles. In adults, especially from neglect, the disease often assumes a chronic form; in children, less frequently.

Treatment.—As to gentle laxatives, sudorifics, and tonics, may be similar to that for erythema. The drink should be barley water, slightly acidulated with lemon juice; or whey, with a small quantity of tartrate of potass dissolved in it.

If there be suspicion of unhealthy breast milk, a nurse should be provided.

In protracted cases I would, after the sixth year of age, advise the cautious use of dulcamara. When, on the subsidence of eruption, languor should long continue, the tonics should be increased and country residence be adopted.

The local applications should be tepid water, or mild French roll poultice. In cases attended by symptoms of severe local irritation, thin almond emulsion, with a lotion of acid. hydrocyan. $\mathfrak{z}\text{j.}$, aq. sambuci $\mathfrak{z}\text{vii}\text{j.}$; the syrup of poppies should be given at night; for the disease and the symptoms react on each other, sleeplessness deranging the health, and adding thereby to the disease.

In some cases the ointment (') has been very efficacious. Friction should be avoided, and the linen should be frequently changed.

Vesicles resembling eczema are produced from several local applications in frequent use, as gum plasters, linseed, and even bread poultices, and by friction with croton oil.

URTICARIA.—NETTLE RASH.

Uredo—Essera—Febris urticata—Epinyctis pruriginosa.

The mild form consists of white elevations, circular usually, sometimes longitudinal; the severer, of very pale pink elevations, on a deeper rose-coloured surface. The first is unattended by febrile symptoms; the second is preceded and marked by the following—cephalgia, gastrodynia, lassitude, synocha, intense itching like the sting of a nettle, aggravated by friction or heat. The eruption lasts six or ten days; the cuticle then exfoliates.

In rare cases the spots become *tubercular*, (*U. tuberosa*), and I have seen them penetrate the cellular tissue, attended by still severer symptoms.

The exciting causes are various: sometimes emotions of the mind, or excessive exertion, acetic acid, mushrooms, honey, the rind of cucumber, strawberries, shell fish, especially muscles, and unhealthy breast milk.

In cachectic habits the eruption may assume a livid hue, appearing more like extravasated blood, or purpura.

These varieties, and the frequent recurrence in the same patient, are proofs of peculiar susceptibility.

Constant irritation will often produce marasmus, remittent fever, and in some cases somnolency approaching to coma.

Treatment.—A mild emetic of ipecacuanha should be given early, followed by a laxative and cooling diet. The cause of the disorder should be ascertained, and the remedies *relatively* administered, as well as the *preventives*, as change of milk or food, free division of the gums, &c.

If we have twitching or convulsion ensuing from irritation, the tepid bath should be employed, and Tr. assafœt. given in warm water.

In debilitated constitutions, the tonic mixture (5).

In those cases interspersed with the papulæ of lichen, I have preferred, subsequently to laxatives, hydr. oxyd. nigr. combined with minute doses of muriatic acid.

External applications are of little utility.

ERYSIPELAS.

Rosa volalica acuta—Ignis sacer—St. Anthony's fire.

The full history of erysipelas would require a lengthened treatise. I shall here, as briefly as I can, divide the disease into the atonic and the acute forms, without describing its seat, or its very numerous causes, or entering on the question of contagion, or its identity with puerperal fever.

Atonic.—I am writing of that erysipelas which is marked by deficient power from the first. This form, which often terminates in gangrene, is sometimes of intra-uterine origin; it occurs a few days after birth; a dull crimson blush, changing to a more purple or livid hue, then often studded with livid vesications, or large bullæ, which terminate in sphaceloid ulcerations. It is usually commencing about the abdomen and genital parts, and in new-born infants may have its spring in umbilical phlebitis. It is attended by a weak thready pulse, prostration, brown tongue, and delirium. The peritoneum will sometimes participate in the disease, and in many cases, sinusses will form, and sloughs of cellular membrane and tendon. The *arrest* of these formidable symptoms is marked by a white line of demarcation in the earlier stages of erysipelas gangrenosum, and the same event is indicated in the latter periods of the disease, by the secretion of pus, instead of an ichorous or sanious discharge.

The treatment should be commenced by a mild laxative, followed by the carb. ammon. dissolved in orange-peel water and syrup, and minute doses of opium or morphia, every four or six hours. But if the skin is hot and *dry*, the liq. am. acet. should be added, and the anodyne given with more caution.

If the child is a suckling, there should be a healthy substitute for the *anxious* mother. If not, the food should be concentrated jelly,

or sago, or arrow-root, or starch mucilage, or chicken jelly, or blanche-mange, with small quantities of port wine, or even a few drops of brandy.

If while we have hot and dry skin we have also cerebral symptoms supervening, as intolerance of light, screaming, or convulsion, infusion of serpentaria should be given with liq. ammon. acetat., and the forehead should be wet with ether lotion. This is a perplexing condition, as depletion is at least an evil; if constipation occurs, the most advisable aperient is ol. ric. and ol. terebinth. combined.

Local Remedies.—In the early stage, camphorated tincture applied on linen rags folded, or starch powder sprinkled on the part. If the disease progresses, and is marked by distention, the following lotion :—

℞ Am. subcarb. Plumb. diacetat. ā ℥ss. Aq. rosæ ℥x.

A poultice of stale beer-grounds or yeast should be applied, if the disease has terminated in sloughing, and if gangrenous erosion should be spreading, the local application of balsam of peru pencilled on the part twice or thrice in the day, previous to the poultice; and if the fetor should be distressing, the solution of chloride of calcium should be applied carefully over the surface.

Where matter, or the slough, is deeply seated and burrowing, it may be essential to make deep incisions, to allow of its escape; this is a severe mode, but it is adopted to avert a greater evil.

Acute.—Skin of a bright scarlet hue and shining, preceded for about two days by heat and tingling, and fever; the pulse not usually so hard and full as in phlegmon.

The disease will sometimes decline on the third or fourth day, the skin becoming yellow and desquamating. If it proceeds, vesicles or bullæ form, which sometimes become purulent. In two or three days these burst, and discharge an acrid glutinous fluid. This is the superficial form. If it be commencing more deeply, we have more severity of symptoms—rigour, acute fever, and œdematous swelling, a purulent sanies is burrowing early among muscles or tendons, mixed with clots of thin grumous blood, altogether unlike the pus and circumscribed cell occurring in phlegmon. At this point the disease is liable, if not energetically treated at the commencement, to assume the sphaceloid character, and will require a mode of treatment adapted to this change. We sometimes observe in the acute stage that the cutaneous vessels are inflamed, and we find often purulent depositions in the serous cavities and in the lungs.

Treatment.—In the milder forms, chiefly internal—mild laxatives, light diet, cool air, sub-acid and diluent drink, and saline diaphoretics, the inflamed part being sprinkled often with flour. If the blush does not subside, more profuse purgation by colocynth, calomel, or elaterium, and a frequent repetition of the effervescing saline draught, or liq. am. ac. If there is an indication of congestion

about the brain or lungs, the cupping-glass should be applied on the sound skin. A blister, or the pencilling of a strong or even saturated solution of arg. nitrat. for about half an inch around the margin of the efflorescence will sometimes arrest its march. This latter mode may be once or twice repeated. In plethoric children leeches may be applied on the sound skin around the inflamed part. If the inflammation is deeply seated, incisions may be made, to unload the vessels and take off distention, and to evacuate the morbid fluids formed; over these, fomentations and thin poultices. The patient, or the inflamed limb, should be constantly kept at rest; the inflamed part, if possible, somewhat elevated, so that the blood may readily flow through the returning veins.

If the disease arises from a wound, the treatment scarcely needs variation; but if that wound be a deep puncture, it is best to convert it into an incised wound by a free and deep incision, if the nature of the part admit of this.

On convalescence, cascarilla, calombo, quinine, and the mineral acids, should be adapted to the degree of weakness, and the child should enjoy pure air.

PHLEGMONOUS TUMOURS.

These occur in various parts and tissues of the body; either as indications of some internal or constitutional derangement, or as critical, at the decline of fever or acute disease. Their varieties being as follows:—

The furuncle, or boil, is of a conical shape, its base deeply seated, its apex intensely painful, and assuming either the acute form, marked by erythism and rapid suppuration, or the chronic, of a milder character.

Phyma, a phlegmonous tumour of a broader shape.

Epinyctis—terminthus, a tumour of the size of a pea, livid or dusky red, acutely painful, containing a sanious fluid.

Phlegmon of the submaxillary, cervical, parotid, or inguinal glands, unattended by strumous taint, and not induced by compression or strain.

And the inflammation and suppuration of the ciliary and follicular glands of the eyelid—stye, or hordeolum.

The suppuration of all these tumours is salutary, and, in reference to the constitution, it would be well to promote that process in every case. When, however, they are seated close to important organs, as the eye, or when a gland enlarges in the neck or cheek of a female, it will be better to attempt a discussion of them by depletion—leeches and cold poultices, and free purgation; if the child is debilitated, speedily substituting a vegetable tonic, with mineral acid, and a grain or two of hyd. sub. 2 vel 3 die. To promote suppuration, hot steam, fomentations constantly applied, or bread and linseed poultices, or oleum terebinthinæ, warm, with linseed meal, repeated every three or four hours.

In the common glandular abscess, on the perception of distinct fluctuation, an early incision, as small as is consistent with perfect evacuation, should be made: this is to avoid an unsightly scar. In the phlegmonous abscess in other tissues, and when not conspicuous, the incision may be more freely made, and the matter expressed, and a linseed poultice applied every fifth hour for two days, then changed for one of French bread, progressively decreasing the temperature. When, however, the abscess is deeply seated, and the cellular membrane has been implicated and has sloughed, hot linseed poultices should be continued, to dislodge the membranous flakes, and obviate irritation, and a succession of suppurations. In the sty, if the depletory plan does not cause it to disappear soon, very warm water should be applied often on a sponge, or a poultice over the closed eye. An induration often remains in the part, especially in weakly children; this may be greatly moderated by a poultice, made of extr. belladon., French roll, and camphorated tincture.

On convalescence, the country air, and the tonics I have before advised, should be adopted; and every second or third day the powder (²).

In many children there is a disposition to glandular suppuration, not of a strumous character; for these I would however recommend sea air and bathing, nutritious not stimulant diet, the mixture (⁵), or the powder (⁷).

Tinea ciliaris—*Lippitudo*—Chronic sty.

A chronic inflammation in the bulb of the eyelash, which by degrees pervades the whole ciliary circle, and, if not checked in its early stage, terminates in lippitudo, the glands of the cilia slightly discharging; in time their power of secreting hair having ceased, and leaving a permanent red circle around the eye.

Treatment.—Laxatives, combined, in weakly children, with the mixture (⁵) or the powder (⁷). In the first stage, leeches in the vicinity of the lashes; if much redness, fulness, or pain, warm water or poultices, in the second stage, U. hyd. nit. M., the internal plan being continued.

HERPES.

Zona—*Herpes miliaris*—*Ignis sacer*—Shingles.

The transparent vesicles of herpes vary from the size of a millet seed to that of a pea; their most common mode of distribution is either as a belt around or partly around the body, (herpes, zoster, zona;) or in defined clusters, (herpes phlyctænodes;) or in circular patches around an inflamed area, the surface of which desquamates as the vesicles decline, (herpes circinnatus;) or, in the very rare instance (herpes iris) of vesicles disposed in three or four concentric circles or rings of varied and beautiful colours, and elevated above the surface of the surrounding skin.

Herpes—Zoster—Phlyctænodes.

Its premonitory symptoms, which are not, however, *essential*, are for two or three days a tingling and pink blush, rigour, cephalalgia, nausea, subsiding always when the vesicle assumes the opaque form, if not before, i. e. from ten to twenty hours, the blush fading in three or four days, the vesicles bursting, their fluid concreting into yellowish crusts, desiccating in five or six days, *successive* vesicles, however, sometimes forming for three or four weeks. Its usual seat is on the trunk, in the form of a zone—about the genital parts, around the mouth, sometimes extending to the tonsils and uvula, and also in the auditory canal. If seated near glands, they often become enlarged.

It occurs most frequently in the summer, and is often dependent on checked perspiration and cold drinks.

Treatment, should be commenced with a powder of calomel, a draught of potass. tartr. an hour after, potass. carb. and lemon-juice, often given in the effervescing state, light diet, repose, if there is much restlessness minute doses of liq. sedativ. added to the draught, or spt. ætheris c. or Tr. valer. amm. in warm water.

I have seen cases so acutely marked as to require the abstraction of blood.

Locally, tepid water lightly applied, or very weak saturnine wash, or the part sprinkled with fine starch powder, or ungt. cetacei applied on *singed* rag. Friction to be avoided.

Neglect of these precautions will convert the simple disease into one of more severity, a ragged ulcer, which spreads often very quickly, (*herpes exedens*.) To this should be applied the carrot poultice, or a weak nitrate of silver wash, or one of dilute solution of chloride of sodium.

To the internal remedies already prescribed should be added the quinin. sulph. in proportionate doses; and in very severe cases, the arseniate of ammonia in distilled water, the minimum dose 1-24th of a grain.

Herpes is distinguished from erysipelas and pemphigus, by the smaller size of its vesicle—from eczema, by its more inflammatory base, by erythism or fever.

H. circin.—H. iris—Vesicular ringworm.

These two forms are more permanent, but their premonitory symptoms are very slight, often not observed, although some slight tingling for a day or two may be recollected, and some uneasiness about the stomach and bowels, with sometimes slight excitement of the system.

Treatment.—Astringent applications are required, unless heat and pain should indicate the premising of soothing fomentations, decoct. papav. and vin. opii. The solution of borate of soda, or of the sulphates of zinc or copper, or the decoction of galls. These should be applied thrice in a day, on linen rags.

The diet should be light and nutritious, and the bowels kept slightly relaxed by the tartr. potassæ.

Herpes cir. is distinguished from the rings of lepra by its more rapid changes, and from annular roseola by its vesicles.

On the subsidence of all these forms the vegetable tonics should be given.

LEPRA.—LEPROSY.

Dartré furfuracée arrondie—Leuce—Melas—Lepra græcorum.

A deposition of grey or whitish scales, like talc, assuming the form of circles, or segments of circles, marked by fissures of a light olive or of lake colour, surrounding a central space, which, as well as the external margin, is usually of a rose red. In the commencement, small reddish-white papulæ arise, which are soon covered with thin scales. These spots are usually commencing about the knees, elbows, and eyebrows, and are often influenced by variation of the weather, especially on the approach of rain.

In protracted cases, the disease often extends to the matrix of the nail, which is thereby curved. Lepra is attended with very little constitutional derangement.

I speak of course without reference to the specific form arising from syphilitic taint. In some patients the disease returns periodically, I think very often in the spring and autumn, and is often aggravated by improper diet.

Treatment.—In the incipient form, mild aperients and light diet, and if the vascular action is high, leeches or venesection, followed up by sulphate of magnesia, each morning, for two, three, or four weeks. In lighter cases, Plummer's pill should be given at night, and the following draught thrice in a day; it is the maximum dose for the age of ten.

℞. Liq. potass. Mx. Liq. arsen. M iv. Syr. pap. ʒjss. f. h.

These remedies will be more efficacious in the country than in crowded towns.

Warm water or barley water should be applied twice in a day, with a sponge.

Ungt. hydr. precip. alb. ʒj. U. cetacei ʒj. as an ointment.

If in three weeks the disease does not yield to this treatment, the doses of aperients should be increased, and the sulphuret of potass administered internally, and two grains of calomel each second night. The bath (4) should be employed, adding chlorid. sod. lb.i. its temperature 98°, the child to be immersed for twenty minutes thrice in a week. I may add, if the pulse be full, the skin hot and dry, &c., we cannot hope for benefit without loss of blood. If the scales render the skin stiff and inflamed, a solution of sulphuret. potass. should be frequently used, or bran and water, or cream; and in very stubborn cases, with firm attachment of the scales,

liquor potassæ, or dilute muriatic acid cautiously applied; or a lotion of Tr. lyttæ and aq. pistillat. If the disease resists these modes, I do not hesitate to apply a blister for thirty hours, for the purpose of producing a new tissue, at the same time continuing the internal means.

If country residence can be adopted, I should advise Bath, Harrowgate, or Leamington.

On the disappearance of the disease, the vegetable or mineral tonics.

PSORIASIS.

Scaly tetter—Small dry scall—Lepra alphoides—Scales of the cuticle.

The effect of acuto-chronic inflammation of the vessels of the cutis, depending on peculiar action or hereditary disposition.

Soon after the appearance of reddish points or lumps on the skin, small white or pearly scales, separate or in a congeries, or surrounding a central *pinkish* space, appear, the surrounding skin being slightly discoloured. Lepra thus differs from psoriasis, by being more raised and annular, the centre more depressed, the scales more profuse. In other cases, the patches are of a reddish or brownish colour, interspersed with fissures, accompanied by intense itching or heat, increased by heat or friction, sometimes producing ulceration and a purulent fluid; and this, concreting with the detached scales, forming a more elevated crust. Around the scales is usually a deep rose circle increased by exertion or excess; beneath the scales the skin is red and irritable. In bed the scales are often detached in profusion, and their friction aggravates extremely the tingling and itching.

This is the usual form of psoriasis, with which the other varieties of squamæ might be, in a practical point of view, combined.

Treatment.—Equable temperature, light diet, and repose are essential; the contrasts to these, in a system predisposed, may develop the disease on the surface.

The diseased skin should be lightly covered, and nothing but warm water applied in the first stage. In many cases these cautions, with free purgation and diaphoretics, assiduously given, will check or reduce inflammatory action. If this should be increasing, venesection should be employed, or leeches applied around the edges of the scaly patches. If much irritation exists, with sleeplessness and fretting, poppy fomentations should be used, and the mixture ⁽⁸⁾ thrice in a day.

On the subsidence of the increased action, the bath ⁽⁴⁾ should be employed; but if the redness should be *permanently* increased by this, it should be suspended, and the following powder administered thrice in a day:—

R. Sulphur. precip. ʒj. Potassæ supertartr. vj. Pulv. rhæi ʒj. (div. in pulv. xij.)

24—g

4 dandy

If there be much debility, or a violet or dark hue on the skin, the quinine may be given, in *infus. cascarillæ*, or *Tr. iodin. n. ij. ad viij.* twice in the day.

In cases more protracted, I should advise the arsenical solution, or *decoct. dulcam.*, or from three to eight grains of the following mass thrice in a day:—

R. Pic. liquid. Farin. tritici, q. s.

If the scales do not readily separate, *liq. potassæ* or *acid. muriat.* may be applied, and when the effect is produced, the *lotio flava* will be found beneficial; or the citrine ointment, which should be always washed off before the fresh application.

Regarding the psoriasis and fissures occurring about the lower lip which I believe often indicate chronic disorder about the viscera, I have found the application of leeches on the abdomen sometimes effect a very beneficial change.

FOLLICULAR TUMOURS.

Grubs—Follicular wart—Acne—Sycosis.

The earliest disease in the sebaceous follicles is that termed *crinones* or grubs, the back of the sucking infant being studded with white elevations—inspissated sebaceous matter. Friction with a coarse cloth and warm water, by the fire, and a gentle laxative will speedily remove these. I may here briefly refer to "*morbus pilaris*," when the *capilluli* on the back of an infant, by being loosened and not dislodged, excite itching and *papulæ*. For this, poultices and extraction of the loose hairs should be employed.

FOLLICULAR WART.

White, hard, and rather shiny elevations of the follicle, usually occurring on the cheeks and forehead, often stationary for some time, and on derangement of the bowels becoming enlarged, of a pale pink colour, and surrounded by inflammation. A suppurative process will then commence in the cyst, and the sebaceous matter is dislodged, but it may sometimes increase to the size of a walnut, a drain of cheesy matter continuing, which will sometimes concrete, forming crusts.

The regulation of the bowels will often check and blight these tumours; if they increase, excision must be adopted; the wart is lifted by a pair of dissecting forceps, and excised by sharp scissors, or the cyst may be pulled out by the forceps, and the part touched with a solution of nitrate of silver.

In chlorotic girls on the approach of puberty, these tumours will sometimes appear; of course attention to the functions of the uterine system will be required.

ACNE.

A. simplex.—A. punctata.

Chiefly occurring towards the period of puberty. Small circular elevations of the follicle, with or without the black point in the centre, which is caused by mere exposure to the air of the matter at the orifice of the follicle. They sometimes disappear spontaneously, especially at the completion of puberty, and are succeeded by slight desquamation, or fissures of the skin. They appear singly, or in clusters, sometimes surrounded by dusky discoloration.

Inflammation and suppuration may however take place, especially on derangement of the alimentary canal; a yellow point, and subsequently a crust, being formed on the surface, the follicle becoming obliterated. In other cases the swelling will assume a more tubercular form, and become extended, hard, red, and painful, (A. indurata,) and this in a very severe degree, both from intestinal derangement, and also, it must be added, in amenorrhœa, and on the progress of puberty.

To appropriate our remedies to these various internal causes, we must employ laxatives, mild mercurial alteratives, and decoctum sarsæ, or the preparations of steel.

In the inflammatory cases, with heat or pain, leeches, or even venesection, may be sometimes necessary, and a mild French roll poultice applied; more frequently, however, the state is that of chronic induration. To promote the absorption of this,

Iod. sulphur. gr. x to xx. U. cetacei ʒi.

or the sebaceous points may be expressed, and the following lotion applied:—

R. Oxym. hydr. gr. ss. Acid. mur. ʒj. Aq. ros. ʒvj. Misce.

SYCOSIS.

When follicular obstruction occurs on the hairy scalp, the incipient tubercles usually occur in clusters, being softer, more pointed than those of acne, and surrounded by a faint vermilion blush. They usually *suppurate* in five or ten days, the ulcerated surface being of an irregular, granular, fungoid appearance, somewhat resembling the pulp of a fig; often bleeding on pressure, and becoming spongy and *overlapping*, attended by an ichorous oozing, of a rancid odour. About the edges we sometimes see a slight furfuraeous incrustation.

Treatment.—If no inflammation surround the tubercles, the matter may be expressed, as in the case of acne, and the foregoing lotion applied. If there be inflammation, the liq. plumb. subac. and crumb of roll as a poultice. If suppuration occurs, the roll poultice only; and on the subsidence of the inflammation, the yellow wash should be applied to the fungus. In the early and active stages, laxatives and antimonial sudorifics; in the latter, with the addition of the vegetable tonic infusions, with muriatic acid.

PORRIGO.

P. favosa—Tinea favosa—Favus—Tinea capitis—Scabies capitis favosa—P. lupinosa—Teigne favusc—Honey-comb scall—Scald head.

Large, flattish, light yellow pustules, rapidly becoming so from the papular form, chiefly about the ears, occiput, mouth, and forehead, and on the scalp; the pustules soon becoming confluent, bursting, and pouring out a very glutinous secretion, which, speedily concreting, forms yellow, olive, or brown crusts, rocky, or assuming a *cupped* form, interspersed with fissures, and sometimes containing fresh pustules; the incrustations thus becoming cellular, like the construction of a honey-comb. It is *then* often exhaling a very rank odour—the origin of its name.

In severe or neglected cases, the lymphatic glands in the vicinity become enlarged, and in rare instances I have seen the tongue studded with patches and vesicles. On the scalp the hair, if allowed, will become matted, and in a very filthy condition; and if the hair drops off, the new hair will be flaxen, weak, and often gray.

If seated near the eyes, ophthalmia of a very acute form will sometimes occur. Tinea ciliaris will be produced, and an œdematous state of the puncta lachrymalia, by which the tears are squeezed out over the cheek. If much protracted, this will end in ectropium—of the lower lids especially.

Porriga differs from impetigo in its more rapid change from papula to pustule, and especially in its being contagious. It may, however, arise *de novo*.

Treatment.—In the milder cases, the powder ⁽²⁾ each evening and morning, the laxative mixture ⁽²⁾ each second or third morning; and sponging with tepid water, or a soft roll poultice, will sometimes cure speedily.

In strumous habits, the mixture ⁽⁵⁾ should be given instead of the powder, in the morning.

In more severely inflamed cases, more powerful laxatives, and even abstraction of blood by leeches, should be employed.

On the subsidence of inflammatory action, flour may be sprinkled on the part for three or four days, occasionally.

Subsequently, one of the following ointments or lotions. It will often be essential to change them, as one will succeed to a certain point, and the capricious disease will then be stationary, or retrograde.

Ungt. hydr. nit. mit. p. i. U. cetacei p. ij. :—Ungt. picis. Ungt. sulphuris. Ungt. cetacei p. æq. :—Sulphur. ioduret. ℞j. ad ℥ss. U. cetacei ℥j. :—Argent. nitr. gr. vj. Aq. distillat. ℥vj. :—Acid. nitr. ℥jss. Ol. oliv. Aq. distillat. a ℥ss. The bath (4) used as a lotion; or, Liq. potassæ applied each night. A French roll poultice being constantly kept on the part.

PORRIGO SCUTULATA.

Porriga annulare—Tinea annulare—Favus confertus—Ringworm—Pustular ringworm.

Patches of very minute, slightly elevated, yellow pustules, deeply

imbedded in the skin, detached, often remote from each other, situated chiefly on the hairy scalp, or on parts most thickly covered with down. On abrasion, circles of a brownish pink hue are formed, which gradually extend, leaving a central space free from pustules, though of a deeper colour than the surrounding skin, and slightly exfoliating. If seated on the scalp, the hair will become but slightly matted, but I *have* seen caries of the bone produced, by the disease deeply extending. When the hair is loosened, its colour fades, and it becomes thin and brittle. The skin beneath the crusts is red and glossy, with *small* purulent points. In very protracted cases, we see ridges produced on the skin in consequence of absorption throughout the diseased structure.

These cases will be often produced by derangement of the bowels; sometimes the erythematous condition of scarlatina will affect the bulb of the hair, by which the hair itself becomes loosened, and pustules form, aggravated by the irritation of the loose hairs; it is also extraneously produced by inoculation, or contact, and by neglect of cleanliness. There is no doubt, too, that stimulant articles of diet are a fertile source of this disease, as pea-soup, salt meat, as well as exposure to cold.

Treatment.—On this account the constitutional treatment should be always premised, in the form of laxatives and mercurial alteratives, and this in mild and incipient stages will sometimes effect a cure, chiefly by removing the obnoxious excitements, and allowing the vis medicatrix to influence. In other cases, the powder ⁽²⁾ each night, the mixture ⁽⁵⁾ each morning, combined with free use of lemonade.

The local treatment should be commenced with warm water washes, and roll poultices, for three or four days; the loose hairs should then be detached by forceps; and, if there be no inflammatory condition, recourse should then be had to more stimulant treatment; but patience and perseverance are much required. I append recipes of several forms; premising, that it is essential to wash off gently with soft flannel the previous applications, before employing the fresh ones.

Acid. nitric. ℥ss. ad ʒj. Aq. dist. ʒi. ad ʒiij. :—Cupri sulphat. pulv. rubbed in lightly.

These two applications should, if they produce pain, be washed off ten minutes after their application.

Liq. plumb. subac.—Acid. acet.—T. opii a ʒiij. Mist. camphoræ ℥ss.: U. Hydr. nit. m. ʒj. Camphor. ℥ss. Sulphur. ʒj.: Potassæ sulphuret. ℥ss. Aq. dist. ʒj.: Chloruret sodæ solut. in aq. distill.: Sodæ alicant. ʒiij. Potass. sulphuret. ʒiij. Aq. ʒiij.: Acid. acet. (tepid) o. n. Ungt. hydr. n. m. mane.

If the crusts are very dry, liq. potassæ should be applied, and subsequently a warm poultice; after this, the infus. gallæ, to restore healthy action. In cases of several months' or years' standing, I apply a blister for 24 hours, for the purpose of changing completely the cutaneous tissue; it need not be kept open above a day or two, if it has effectually penetrated the deeper textures.

PORRIGO FURFURANS.

A profusion of branny scales, interspersed with very minute red points, and surrounded and intersected by rose coloured margins.

The constitutional remedies should here be the same as those directed in *Porr. favosa*; and the local applications which I have seen most efficacious are, the baths ⁽¹⁾ or ⁽⁴⁾, *Acet. dist. p. i. Aq. ros. p. iii.*, or *Spt. rectific. o. n. et. m.* *Ungt. cetacei* being subsequently rubbed over the part.

If the loose hairs should be firmly fixed and in profusion, the *pulv. ellebori alb.* should be gently rubbed in three or four times, and then *ungt. picis*, lukewarm; over this should be applied an oil-silk cap, to which the ointment will slightly adhere, and this being, when it is cold, withdrawn carefully, will eradicate the hairs without occasioning much pain.

DISEASES INDICATIVE OF DEBILITY; MARKED BY LANGUID CUTANEOUS ACTION; OFTEN THE SEQUELÆ OF ACUTE DISORDER.

From original Debility of the System.

PITYRIASIS.

Dandriff.

Even healthy children have naturally a slight exfoliation of flakes of cuticle for some days after birth, but the dandriff is the progressive desquamation of thin scales from the scalp, succeeding pink unelevated patches, chiefly attended by very slight chronic inflammation of the vessels secreting cuticle, but without the discharge of fluid. In neglected cases I have, however, seen the irritation so much increased, as to produce purulent secretion, which dries into a hard crustaceous mass, (*Pityr. scabida*.) In these severe cases there is often falling off of the hair, and the eyelids themselves become diseased. This condition is reacting on the system, increasing the derangement of the health, and, although a non-contagious disease in the simple form, may by this neglect degenerate into contagious crusts, marked by reddish fissures; an effect, however, which can generally be obviated by constant washing and laxatives.

On the breasts of children, about the tenth year, are often scattered light yellowish scales, sometimes scarcely apparent, (*Pit. versicolor*), an appearance sometimes resembled by the freckle, or the liver spot, (*chloasma* &c.) which, however, is a mere stain, without elevation. In children of a cachectic tendency, these spots will be of a dark or livid hue, (*Pit. nigra—melasma*), and this will often

occur in children who have been debilitated by living in tropical climates.

If the exfoliation of the scales is not checked by warm washing, the following lotion should be gently rubbed on them.

℞. Liq. potassæ ʒj. Aq. ros. ʒiv.

The head to be washed with warm water and curd soap. In cases marked by much debility, the mineral acids in dec. sarsæ should be given, and if the disease produces much irritation and restlessness, which will especially be the case should it extend over large portions of the skin, from 1 to 4 drops of liq. opii. sed. should be given once or twice a day in the food.

ICHTHYOSIS.

Fish-skin disease.

A squamous condition of the cuticle, the result of peculiar chronic inflammation of the cutaneous vessels, usually about the arms and legs.

It commences with simple, dusky discoloration, attended with some degree of debility, symptoms usually for a time disregarded.

As the disease advances, elevated scales appear, of a dirty hue, imparting to the touch the sensation produced by a dull file. There is sometimes a slight redness around the edges. The skin is nearly imperspirable on these diseased parts, the velamina being obstructed—decidedly so in those indurations occurring at the adult period chiefly, (ichthyosis cornea.)

The lamina are difficult of permanent removal, a fresh crop succeeding those detached.

When laxatives, sudorifics, and the warm bath have been employed about a week or ten days, we should employ the bath (⁴), with the use of mercurial alteratives, and the liquor arsenicalis, *mij. ad vj.* thrice in a day, but patience is most essential in our treatment of ichthyosis, especially in crowded cities.

In some cases much relief will be gained from the waters of Bath and Harrowgate, and from the following decoction :

℞. Rad. rumicis acuti ʒj. : Aq. ferv. ij. decoque dimid. et cola. : Sumr. cyath. min. ter indies.

The loathsome pellagra of the plains of Lombardy, an aggravated form of ichthyosis, assumes the appearance of black-fish skin—a livid and scaly crust.

ELEPHANTIASIS.

Lepra Arabum.

Tubercular swelling of the corium ; appearing externally as a hard, rugose, fissured, and knotty condition of the cuticle, and assimilating closely to ichthyosis, from which it differs by greater severity of symptoms ; heat, pain, and surrounding redness being

often present, sometimes with aphthous, and morbid and red condition of the tongue and fauces, gastrodynia, and other marks of constitutional disorder.

This aggravated form of squama is very rare in children.

Treatment.—Hyd. sub.; ol. ricini; ant. tart.

In very stubborn cases, einp. lyttæ; ol. ricini; occasionally, mercurial alteratives, antimonial diaphoretics. Light diet.

If pain is felt in the abdomen, leeches will be of service.

In inveterate cases, blisters should be applied, so as to detach the scales.

ALOPECIA.

Athrica—Area—Porrigo decalvans—Ophiasis—Depilatio—Calvities—Baldness.

Patches of baldness on the scalp, the surrounding hair growing thickly, close to the margin; each hair, however, in the vicinity being of a *conical* shape, sometimes bifurcated. If neglected, the patches will often extend to the denudation of the whole head. This baldness is a simple deficiency of vascular action in the secreting gland of the hair, unaccompanied by discharge, although the microscope *may* discover the slightest granular elevations. In infants, indeed, we sometimes see light patches of weak capilluli; and after fevers, the hair will become thin and wiry, subsequently dropping off, and in extreme cases producing complete baldness. In some children affected with depilation, we see the nails shrunk and withered, and somewhat incurvated, as in phthisical patients.

Treatment.—Occasional shaving of the head—Macassar oil—bear's grease—spt. camphoræ—brandy, p. æq.—decoct. foliar. nucis juglant.—lotio argent. nitr.—lot. acid. nitr.; in very stubborn cases, pulv. lyttæ occasionally rubbed in. The young hair should be washed daily with strong rosemary tea. The first hair is always silky and fine, and the proof of progress in remedy is its firmer growth.

In very debilitated children, we sometimes observe an extensive cuticular relaxation.

SHRIVELLED SKIN.

The cuticle, losing the normal attachment and support of the cellular tissue, becomes shining and puckered, and desquamates.

In the same attenuated constitutions, we also find excessive sweating produced,

EPHIDROSIS,

perhaps unaccompanied by any acute or organic disease.

These are of course decided indications of general debility, and point to the mode of treatment—concentrated nutritious diet, pure air and exercise, mild aperients, and tonics.

On the contrary, we have in languid constitutions that defective

capillary circulation, by which the skin becomes dry, cold, waxy, and unyielding; internal engorgement and effusion into the cellular membrane subsequently occurring, which effusion (of serum) speedily coagulates; in the end we have that disease termed,

SKIN-BOUND.

Œdema cellularis—Indurissement du tissu cellulaire.

The child is extremely feeble, spasmodic contractions often occur, and occasionally jaundice will supervene; invariably we have derangement of the alimentary canal.

The treatment should consist of mercurials and diffusible stimuli, and the warm bath, and if the distention caused by the infiltration be excessive, careful incisions through the skin or acupuncture.

From Derangement of the Chylopoietic Function.

APTHÆ.

Thrush—Miliaria of the mucous membrane.

Minute pearly vesicles on the mucous membranes, extending from the lips to the anus, terminating in thin white pellicles.

The simplest form of apthæ is that of the suckling, (A. lactantium,) sometimes within a few days of birth, accompanied by erethism; the mucous membrane assumes a slight crimson hue, the papillæ of the tongue are rather raised; in a day or two opaque white flocculi appear, and are sooner or later detached from their superficial ulceration. By characteristic signs, as nausea, intestinal irritation, tenesmus, we may trace the disease in its downward course, from the mouth to the anus. In some cases, there may supervene considerable erosion of the gums and fauces.

Treatment.—A healthy breast for the infant, a mild emetic of ipecacuanha, the citrate of magnesia, or the pulv. potassæ c. ⁽³⁾ twice in a day; and after a week or fortnight, moderate doses of the tonic mixture ⁽⁵⁾. A syrup of mel boracis and syrup. mori, applied on a camel's hair brush thrice in a day.

The diet should be melted jelly, blanchmange, chicken jelly, or sago, with port wine moderately and carefully given on convalescence. Cool or temperate atmosphere.

MILIARIA.¹

Millet-seed eruption.

Minute pearly vesicles, extensively spreading, rarely surrounded

¹ The miliary fever (suetie miliaire) of puerperal women appears to be an aggravated form of miliaria, under a peculiar condition of the system.

by efflorescence, usually attended by transpiration of an acid odour, depending on a peculiar action of the cutaneous capillaries.

It is symptomatic of some febrile excitement with debility, and may be induced by stimulating diet, and increased by unwholesome atmosphere. In some cases it may be critical or salutary, although always indicating weakness, yet by *extensive* irritation it may react, and thereby reproduce excitement, and sympathetically influence the viscera, especially the lungs and the brain, and sometimes the urinary organs.

The internal and dietetic treatment similar to that prescribed for aphthæ; the skin being sponged with tepid water, or thin grit gruel.

ECTHYMA.—RUPIA.

Atonic ulcer.

In the commencement, hard elevated papulæ appear, painful under pressure, with a base of bright or dull red, or dull purple. Papulæ which were apparently simple, as strophulus, will in debilitated or cachectic systems, become thus changed; in three or four days the papulæ of ecthyma become pustules, those of rupia vesicular, discharging a thick matter, which soon changes to a glutinous fluid. This, concreting as soon as it has oozed, forms a *circular* crust of a sienna brown, or brownish purple. The ulcers and crusts of ecthyma are smaller, thinner, and less deeply seated in the cutis than those of rupia; and, altogether, rupia may be considered the more severe disease.

Both ecthyma and rupia have been divided into different species, which are truly indicative of diathesis or constitutional condition. Ecthyma vulgare—rupia simplex, being the mildest forms; while the terms cachecticum—luridum—escharoticum—indicate disease of greater severity and danger. The laminæ of rupia are often aggregated superficially, so as to resemble a cone; (*R. prominens*;) a character, indeed, which the crust of a burn will sometimes assume on a weakly child. The protracted and resisting nature of these diseases arises from deficient power of reparation.

The simplest forms occur during lactation, (*E. lactantium*,) the more severe as the sequelæ of acute disorder, or as an outward indication of marasmus, or one sign of the protean syphilis.

The termination of the more malignant form will be in deep dry pits without a crust, or sloughing ulcer, or livid eschars, interspersed with bloody vesicles. The process of healing is slow, and may be retarded, by very slight causes.

Treatment.—The slight forms in infants yield to healthy breast-milk, the mildest mercurial alteratives, and infusion of cascarilla or orange peel.

Locally, a weak solution of nitrate of silver, twice in a day; occasionally a poultice of linseed and decoction of poppy, for four hours.

If the ulcers are gangrenous or livid, and there is emaciation, the

tonic mixture ⁽²⁾ should be given thrice in a day, the anodyne mixture ⁽⁴⁾ at night, if there is restlessness.

In most malignant cases, the following should be administered :

℞. Acid. pyrolign. ℥j. : Syrup. rhæad. ℥ss. : Aq. flor. aurant. ℥j. coch. i. p. ad iii. ter indies,

or the alkaline chlorides, in their usual forms.

As a local application, cataplasms of the chloride solutions, or warm turpentine with roll.

If much itching and pain are present, the following ointment will be beneficial :—

℞. Acid. hydrocyanic. ℥j. : Plumb. acetat. gr. x. : U. cetacei ℥ij. M.

The tepid bath occasionally employed.

The diet should be nutritious and concentrated ; meat gravy, chicken jelly, &c. Pure air, gentle exercise without fatigue.

PEMPHIGUS.

Pompholyx—Bulla febrilis—Pemphigoid fever.

A disease usually solitary, occurring chiefly between the ages of two and seven, assimilating in its progress the form of gangrenous erysipelas.

Symptoms.—Shivering, pain in the head and stomach, fever of four, five, or six days' duration, the pulse then becoming feeble and irritable, ranging from 100 to 120, the child being languid and fretful : a dull erythematous blush or spots appear, and become vesicular, the bullæ being larger and more scattered than herpes, and without much inflammation ; the fluid soon becomes of a straw or dull purple colour, the pulse sinks rapidly, and the fever assumes the mild typhoid form, brownish white tongue, hot skin, thirst. The child dies often from five to ten days from the vesicle, but the disease may be protracted for three weeks. The bullæ will sometimes extend to three or four inches in circumference, flat or *table* separations of the cuticle. The cutis around and beneath the bulla becomes livid or crimson, fissured and divided into flocculi, and even exfoliation of the bones of the fingers has sometimes occurred.

I could adduce many cases in proof of a connection between maternal puerperal fever and infantile pemphigus ; the inflammatory symptoms are then of a more acute form. The sequelæ of acute inflammation in children will often be marked by extensive livid vesications.

Treatment.—If any abdominal tenderness exist *in the very early stage*, leeches may be *carefully* applied, followed by warm fomentations, moderate doses of ol. ricini each second morning, the powder ⁽³⁾ each morning, the mixture ⁽⁸⁾ thrice in the day. On the formation of the vesicles, fomentations of poppy and camomile, or the warm bath ; if very large, the bullæ should be punctured, and a weak solution of argent. nitr. employed.

If the gangrenous ulceration spreads or assumes a dark shade, the mixture ⁽⁵⁾ or the powder ⁽⁷⁾ should be given, with jellies and rich broth, or blanchmange melted. In cases marked by excessive prostration, the sulphate of quinine, or minute doses of solut. mineral. should be watchfully administered; and, if attended by restlessness and indications of pain, the syrup. papav. should be added in the evening.

The formation of bullæ without fever is termed pompholyx; the plan adopted in the early stages of pemphigus should be here employed.

ANTHRACION.

Malignant vesicle—Persian fire.

Nearly allied to pemphigus. A bulla of a reddish fluid, speedily followed by diffused inflammation, resembling that of a venomous bite, rapidly sloughing. In some cases a white line of demarcation checks its march; in others, the cellular tissue rapidly becomes disorganised, and deep caverns form beneath the skin. This is not unusual when occurring in the neck, and about the pudenda of female children. The patient dies typhoid. In these cases dissection discovers black patches or melanosis about the abdominal and thoracic viscera.

The treatment I have above alluded to should here be adopted. In addition, I think the part should be rather freely scarified, and the weak nitric acid, or nitrate of silver lotion applied, and over these a linseed poultice.

This is the usual form of malignant or sloughing abscess in children: in some rare cases, the bullous vesication will not be present, and we have deep-seated inflammation, assuming somewhat the character of

ANTHRAX.

Carbuncle.

An angry, hard, red tumour, unlike the phlegmon; the skin (if the swelling be disregarded) yielding in many points, and at length sloughing extensively, or burrowing deeply beneath the fascia, &c.

These are all indications of increased action with deficient power; still, in the *early* stage, benefit may sometimes be derived from leeches and bread poultices.

The treatment generally that recommended in the case of pemphigus.

If suppuration has occurred, deep and free incision early. Linseed poultices being constantly applied.

PURPURA.

Purples.

A subcuticular extravasation of blood, not disappearing on pressure; minute red points, (stigmata, P. simplex;) small purple spots

(petechiæ;) or large crimson or purple patches, (ecchymosis, P. hæmorrhagica.)

P. SIMPLEX.

The spots resemble flea-bites, but they have no minute point in the centre.

The disease is unaccompanied by fever, but marked by debility, languor, and fretfulness, and perspiration on even gentle exercise. In some children there is an evident predisposition to this vascular lesion on pressure, which in some few instances pervades a whole family.

The treatment should be chiefly dietetic, a small quantity of food being administered at a time. For the suckling, if the milk be suspected, a more healthy breast should be obtained.

The only medicines I would advise are these: the powder ⁽²⁾ each second night, ol. ricini on the following morning. The mixture ⁽⁵⁾ twice in the day.

In cases of diarrhœa, the mixture ⁽³⁾ may be added, modifying the opiate according to the necessity.

P. HÆMORRHAGICA.

Hæmacelanosis—Hæmorrhœa petechialis—Bloody small-pox—Bloody scurvy—Land scurvy—Petechial fever.

Crimson or purple patches of varied and irregular forms, sometimes interspersed with wheals (P. urticans.) These spots may be symptomatic of malignant fevers, when they indicate the worst form of adynamia, as well as extreme danger. In some cases their appearance is preceded and accompanied by full quick pulse, and other marks of a *sthenic* condition, (the hemorrhagic effort,) unattended, however, by acute fever. Then the spots will assume a florid hue, from a higher state of oxygenation, and in this form we find the internal organs especially participate, as indicated by the varieties of visceral hemorrhages, hæmaturia, hæmatemesis, hæmoptoe, epistaxis. More usually, however, the disease from its onset is marked by debility, and the ecchymoses are dark crimson or purple, and often are raised in vesicles filled with purple blood, often breaking through the cuticle. In the scorbutic diathesis, the mucous membranes may be so pervaded by this tendency that internal hemorrhage may occur, proving in the end fatal, the blood becoming paler often towards dissolution. A congested condition of the hepatic system, *i. e.* the cava and portal vein, may perhaps throw the circulation on the capillaries, and if these partake of the general debility, which the hepatic derangement or mesenteric disease may have aggravated, their tender coats immediately yield.

Treatment. This should be regulated by the stage of the disease and vascular power.

Where indications of congestion, of local pain, or high action, especially, prevail, a small quantity of blood may be taken in the

recumbent position; in children, however, caution is far more essential than in adults. But, above all, the restoration of the healthy condition of the intestinal canal should be our aim. The first laxatives should be mercurial, to expel the unhealthy secretions about the biliary and pancreatic ducts, and to excite healthy action of the liver. These should be followed by the mixture ⁽²⁾, so that two or three evacuations may at least be obtained for three or four days; thus the laxative is a most valuable pioneer, and, indeed, becomes a tonic, by inducing a more rapid absorption of nutriment.

On the cessation of pain, and subsequent to free evacuation, infus. rosæ and the citrate of potass should be freely administered, and if the debility should increase, the colombo, the quinin. sulph., and the more powerful mineral acids, or the solut. mineral.

If in the latter stages blood should be constantly oozing from the gums, and other parts of the mucous epithelium, I have found the turpentine beneficial, in this form—

Ol. terebinth. ʒss. Ol. ric. ʒiij. P. acac. ʒiij. Aq. aneth. ʒiij. F. haust.

This is adapted to the tenth year of age.

Infusion of malt, or asses' milk, is the most appropriate beverage. The diet should always be light and nutritious, and pure air should be obtained, as soon as it is prudent to move the patient.

NOME.

Black thrush—Apthæ nigræ—Noma—Gangrenous erosion—Phagedenic ulcer—
Spreading canker, or scurvy of the gum.

In children ill fed, or neglected, or having endured some acute or malignant disorder, a livid crimson hue of the gums and fauces is often observed, and a gangrenous tendency about the angles of the lips, where the cuticle sends off the epithelium. The papillæ of the tongue are prominent and scarlet. The vesicles coalesce and ulcerate, and the velum, the pharynx, and larynx participate, marked often by difficult deglutition and stridulous breathing. Gray sloughs appear on the tonsils, the membrane falls in gray flocculi, or the sloughing rapidly extends, the gums become spongy, the alveolar process is exposed, and the teeth sometimes drop from their sockets. The child becomes restless, is constantly moaning, and its countenance assumes an expression of extreme suffering; a state followed by convulsion and speedy death.

Constitutional Treatment, on the commencement, should be that adopted in the case of purpura: but the tonic plan must speedily be assumed.

Lemonade, or malt tea, as common drink. The yolk of an egg in warm rose-water, jellies, isinglass and water, with port-wine or asses' milk.

Local Treatment. If there be pain and throbbing, mel boracis, cream, and yolk of egg. If sloughing is extensive, lint dipped in bals. peru.; or, dilute muriatic acid, or chloride of lime, or soda.

It is sometimes essential to administer decided anodynes; this, however, should be done with especial care.

Quinine, solut. mineral., or the mineral acids in camphor mixture, tartrate of iron, or charcoal administered in honey, &c., if the throat will bear it.

STRUMA.

Scrophula—King's evil.

That peculiar taint termed scrophula may affect all the tissues of the body; the most usual points of attack being the glands, the bones, and the follicles.

The subjects of struma are of light complexion, with pink cheeks and tumid lips, light hair, bluish or gray eyes, with large black pupil, bluish sclerotic coat, and slender frame. There is often some incurvation of the cylindrical bones, bulging at the extremity, sometimes with curvature and disease of the spine.

The two affections to which I here allude are glandular tumour and abscess, and strumous ulcer.

I have already alluded to the simple local treatment of common glandular abscess. Phlegmonous suppuration is rapid, that of a gland in a scrophulous child is a very slow process, and being so, it affords ample time often for the checking of its course, by effecting a constitutional amendment. This, however, is a work of time. When a gland, or a series of glands, becomes enlarged, it feels like a lump, or congeries of lumps, under the skin, at first of the natural hue and temperature, with slight pain on pressure. A pink spot appears after a time, which becomes soft, a partial suppuration having taken place, the rest of the gland being as hard as before. The fluid is a thin ichorous matter, with caseous flakes floating in it. On its discharge, the abscess is indisposed to heal, having pale ragged edges, somewhat everted, and often bleeding slightly on friction.

In strumous children the ciliary glands are often diseased, as well as the tarsi and eyelids. The suppuration of these glands (tinea ciliaris) constantly produces, if neglected, the depilation of the eyelashes, and the red circles around the lips—lippitudo, or blear eyes.

When struma affects the subcutaneous tissue, we observe light reddish tubercles, of languid progress, which, often on fresh excitement, suddenly soften, ulcerate, and discharge a rather viscid serum, forming flabby sores, and, sometimes, livid crusts. These abscesses are often deeply seated, and their burrowing is marked by loose folds of integument of a doughy consistence; and, when they are more advanced, we often find bands stretching across the cavities thus formed. The walls of the ulcer are pallid and flabby, or livid; a lymphatic gland, of a pinkish white, as yet uninfluenced, being often very conspicuous, almost isolated, in the excavation. In other cases a thickened periosteum may be observed, and around it ash-gray sloughs.

The cicatrices of strumous sores are usually puckered like those of burns, from the shrinking of granulations.

There is doubtless in many a strumous diathesis, excitable by a variety of causes, acute disease, a long course of mercurials, exposure to cold, excesses, warm climate, neglect, indigence.

In those so predisposed, the invigorating of the system in every way is most essential, as well as a healthy locality, pure air, exercise, dry feet, light nutritious food—as jellies and meat gravy—and cheerful society, early sleep and rising.

The sulphureo-gelatinous bath, or the nitro-muriatic acid bath, will be beneficial in every stage of struma, adapting its strength and frequency to the occasion.

On the tubercles, in the incipient state, may be rubbed the following ointment; and when the abscess has burst, and the ulcer formed, the same may be spread on singed rag, and applied twice or thrice in a day to the sore.

Hydr. iodid. ℥j. ad ʒj. : Ungt. cetacei ʒij. M.

I may add, that the Tr. iodinæ will sometimes succeed more than the ointment, when it is pencilled on the swelling.

Internally, the vegetable and mineral tonics.

Iodine in the following form:

℞. Iodin. gr. $\frac{3}{4}$.

Hyd. potass. gr. jss.

Aq. dist. ʒviij. Coch. i. vel. ij. med. ter indies et cresce.

As the common drink, malt tea, or infusion of fresh orange and lemon-peel, sweetened with barley-sugar.

The citrate of magnesia may act as a mild aperient, if not, castor oil should be occasionally given.

In the early stage of tinea ciliaris, leeches should be applied, and poppy fomentation. In the later stages, ungt. hydr. nitr. m., lightly pencilled on the edge of the eyelids.

ONYCHIA MALIGNA.

Inflammation and ulceration of the matrix and soft parts at the root of the nail, commencing in swelling, of a dull red colour, with heat, throbbing, and pain, usually attended by shivering and fever.

An oozing of thin ichor soon takes place between the nail and the soft parts, and ulceration spreads round the circular edge. The surrounding parts are tumid, and of a deep purple hue; the ulcer is unhealthy, the edges thin and flabby, covered by a dirty yellow lymph, and separated from the nail, which becomes discoloured and dead. When allowed to continue, the toe or finger becomes a deformed bulbous mass.

This form of onychia is placed here, as it occurs only in strumous or cachectic habits, except (rarely) from syphilitic taint.

The constitutional treatment should consist of mild laxatives—decoct. sarsæ.

Hydr. oxym. gr. i. Tr. cinch. c. ʒij. ℥ x. ad ʒi. in inf. lini. ter indies.

The mixture (⁴) hor. somn.

Locally, bread and goulard poultices; or, lotio flava; or, poultice with solut. chlorid. calc. vel sodæ. If inflammation should be severe, leeches should be applied. On the healing of the sores, pulv. sarsæ in aqua calcei bis indies.

In very obstinate cases, escharotics must be more extensively used, to destroy the secreting surface; or a blister may be bound round the finger, thus to loosen the attachments; or the nail may be excised by a deep semicircular incision around its root: but this is seldom necessary in the cases of children.

ICTERUS INFANTILIS.

Icteritia—Jaundice.

A dull yellow tinge, extending sometimes over the whole surface of the skin, nails, and eyes, sometimes disappearing spontaneously, at others attended by languor, fever, and wasting. It is, probably, dependent on torpor, or mechanical obstruction of the biliary ducts, and is frequently occurring during some retention of the meconium. It is possible also that the milk of a jaundiced mother may impart this disorder to her child, either directly or indirectly.

Discolourations of the skin, resembling jaundice, will, however, sometimes occur as one mark of another disease.

Treatment. A gentle ipecacuanha emetic once given, and the powder (²), with pure breast-milk, will soon restore more healthy action.

CHLOASMA—EPHELIS.

Maculæ hepaticæ—Pityriasis versicolor—Ephélide hépatique—Leberflectete—Liver spot.

Extensive dull yellow irregular marks of the skin, seated in the corium, sometimes extending over the whole body, occasionally varying in tints, and sometimes accompanied by pricking or tingling.

It varies much in its degree or shades, according to the more or less deranged condition of the alimentary canal; in cachectic children assuming the darker tinge (melasma.)

It consists, probably, in an unhealthy secretion of the vessels of the cutis; yet, although there is usually a concomitant hepatic derangement, it does not seem to be a tinge of bile. Debility and languor, and impaired health, usually characterise the subjects of this discolouration.

Treatment. For the suckling infant, healthy breast-milk, the nurse taking lact. sulphur. ʒi. lacte ter indies.

For the child, the powder (²) each night, the mixture (⁵) thrice in a day; to which, extr. taraxaci gr. i. ad iv., may, in cases of older children, be added. Lemonade should be freely taken.

At a later period of life, the abuse of mercurials will often pro-

duce a leaden or deep yellow tinge, or bronze tint of the skin, nearly resembling the hue of chloasma.

ALBINISM.

A blanched, or apparently exsanguine condition of the surface of the body, the skin being of a *marble* whiteness, in consequence of deficiency in the constitution of the blood.

The pupil is pink, from an absence of the black pigment of the eye, this occasioning blinking and weakness of sight. The hair is usually long, weak, and flaxen, or silky, and glandular swellings, about the neck especially, are prevalent. The functions of the body, as well as of the intellect, are impaired, and languor and inaptitude mark the character.

Amongst the Alps of Le Valais in Switzerland, and the Pyrenees, there is a provincial defect; the "Cretins," as they are termed, being almost all conspicuous for cadaverous, or dark brown, or livid skin, flabby, wrinkled, and scaly.

It is congenital, and yielding but slightly to treatment.

CYANOSIS.

Blue disease.

A cerulean or leaden tinge, dependent on congenital defective organisation of the heart, an open state of the ventricular septum, by which the arterial and venous currents are blended.

If the admission of venous blood into the aortic trunk be minute, life may continue to a certain period, under the unavoidable penalty of lassitude, coldness, and mental inactivity; it is rare that any improvement occurs.

Fatigue and excitement increase the malady.

CHLOROSIS.

Green sickness.

The pallor of young females, the skin being of a *waxy* whiteness, depending chiefly on the constitutional changes about the approach of menstruation.

Of course constitutional treatment is required, the preparations of iron forming the chief remedy, attention being paid to the state of the bowels and the functions of the skin, not neglecting moral management.¹

¹ Albinism, cyanosis, and chlorosis, are not diseases of the skin, but are alluded to as important indications of debility.

ON DISEASES CONSEQUENT TO SPECIFIC INFECTION.

RUBEOLA.

Morbili—Rugeole—Blactiæ—Measles.

A febrile contagious disease, (occurring once during life,) accompanied by a characteristic efflorescence.

The primary symptoms of rubeola vulgaris, which arise ten or fourteen days from exposure to a contagious atmosphere, are these—subject to exceptions—nausea, vomiting, cephalalgia, gastrodynia, languor, red and swelled eyes, epiphora, sneezing, itching of the nose, intolerance of light, somnolency, acid perspiration, white tongue with scarlet edges, frequent dry cough. During the period of dentition these symptoms are the most severe. On the third or fourth day itching and heat of skin, on which appear small red spots, slightly raised, disappearing on pressure. These coalesce, forming red patches of different shades—circular, annular, or crescentic. Among these we see sometimes numerous extravascular red points, not disappearing on pressure.

At this point, epistaxis often occurs, and the febrile symptoms usually yield.

On the fifth day of eruption, the redness fades and becomes yellowish, and the cuticle separates in thin scales attended by itching of skin.

In some children, those with a tendency to phthisis and pulmonary disease, and, probably, those of an hepatic or cachectic temperament, the eruption is sometimes seen broader and darker in its hue (*R. nigra*.)

Rubeola is distinguished from scarlatina and roseola by a more crimson hue; from the latter, especially, by greater severity of symptoms.

The early eruption of measles and small-pox often closely resemble each other, until the vesicular form of the latter appears.

The child is more predisposed during sleep to become affected by the contagion of measles, &c., and in spring and summer; the cases being usually milder towards the autumnal season. During prevailing epidemics, as influenza, we often, too, have a prevalence of measles and other eruptions.

Regarding the prophylaxis of these specific diseases, I believe that pure air, and exercise, and judicious ventilation, with attention to the bowels and diet, are the most efficacious; perhaps sulphurous fumigation, and even its internal exhibition, may have some influence also.

Treatment. Modified by degree of inflammatory action, and accession of various local symptoms in its progress.

High febrile action must be reduced by abstraction of blood, a

mild emetic, gentle laxatives and sudorifics, the lightest diet, subacid and mucilaginous fluids, and moderately cool temperature.

Determination to the brain, lungs, and bronchi, in which inflammation is often acute, or bowels, must of course be met by antiphlogistic treatment, depletion being somewhat less freely employed than in idiopathic inflammations. The warm bath is often serviceable. Neglect of this will often be followed by sequelæ of very severe and often formidable nature—phthisis, profuse diarrhœa, and effusions into serous cavities and the cellular membrane.

On the recession of the eruption in robust children, and those not much reduced, the body may be sponged with vinegar and water, in a warm room.

In cases of local congestion subsequent to measles, especially about the lungs and liver, stimulant frictions, or friction with oil or flour only, will be very efficacious; if the symptoms do not yield to this, a blister, or caustic issue, may be necessary.

Caution is required in the treatment of the mucous diarrhœa often occurring at the subsidence of measles. It must not be treated by powerful astringents; it is often better, if there be pain, to apply leeches to the abdomen, and employ the warm bath. In great exhaustion however, it will sometimes be essential to give anodyne astringents, the mixture ⁽³⁾, to which I would add, P. rhæi gr. ss. only, night and morning. If the disease assume a typhoid form, with livid petechiæ, stupor, delirium, prostration—tonics and antiseptics, as, quinine, cusparia, acid. sulph. ar. and wine will be essential.

On convalescence, country air, asses' milk, light nutritious diet.

SCARLATINA.

Rossalia—Morbilli confluentes.

A specific contagious disease, occurring once in life, consisting of diffused pink or scarlet efflorescence, preceded for a day or two by erethism or fever, usually occurring between ablactation and puberty.

SC. SIMPLEX.

S. benigna—Scarlet rash.

Symptoms.—First stage. Languor, chilliness, restlessness, head-ach, and sometimes epistaxis.

Second stage, third day.—Pink spots appear on the neck and face, (which is slightly swelled,) speedily coalescing sometimes interspersed with darker spots and vesicles, the papillæ of the skin being sometimes erected; the lips and pharynx and tonsils are inflamed, the tongue partially coated, its papillæ red and prominent, the cerebral functions slightly impaired, with sometimes transient delirium and dreaming. In three or four days the efflorescence is continuous; but elevated points are felt, and the skin is thus in

some parts rough. The eruption is most severe in parts exposed to friction and heat. On the third or fourth day the eruption pales; on the sixth, the cuticle peels off, the symptoms subside, the tongue, from being partly coated white, becoming morbidly red and shining. Sometimes for a day or two at this period, there is some recurrence of the symptoms.

Careful nursing, with the aid of cool temperature, mild laxatives and lightest diet, comprehend the chief remedial plan.

SCARLATINA ANGINOSA.—S. MALIGNA.

Scarlet fever.

Commencing in high febrile excitement, pulse quick and wiry, nausea, headach, delirium, eyes and face flushed, jaw stiff and painful, respiration quick and laborious, deglutition impeded, the fauces inflamed, (the degree measuring the danger,) and covered with ash-coloured sloughs, occasionally becoming gangrenous ulcers, a fetid sanies issuing from them over the lips; the papillæ of the tongue elevated, of a deep crimson colour—even the teeth sometimes morbidly red; the parotid and other glands often enlarged; hoarseness, epistaxis, coryza—which indicates great danger—purulent otorrhœa, deafness. Between the second and fourth days the skin is vivid scarlet, the rash rapidly extending, the body swells, the urine is bloody; after severe shivering or shuddering, rigor, succeeded by burning fever. Dark crimson or purple spots appear, (scarlat. maligna,) with acute delirium, (meningitis,) dark brown crust on the tongue, brown sloughing of the fauces, putrid flow from the nostrils, tenderness of the belly: parts subject to pressure slough, delirium and prostration increase—convulsion—death.

I believe that death has occurred where reaction was not sufficient to establish eruption.

Dissection shows ecchymosis in the mucous linings.

Under favourable circumstances, in five or seven days the rash fades, and the cuticle peels off; but there is sometimes a deceptive recession and reappearance of the rash at this time.

The convalescent child is often affected with anasarcaous swellings and effusions into serous cavities, attended with languor, and scanty turbid urine; this dropsical tendency may be much mitigated by dry warmth and modified temperature.

Indications of cure.—To moderate febrile action with little loss of power, *at the onset*, by a mild emetic of ipecacuanha and laxatives; by moderately cool temperature, diaphoretics, diluents, sponging with warm vinegar, tepid bath, 90°; by diminishing the morbid irritability of the heart; by digitalis and hyoseyamus in effervescing draughts, with pot. carb. and succ. limon. In the more advanced stages, vegetable tonics, contrayerva or serpentaria, with æther, capsicum, and ammonia. To obviate the septic tendency, by mineral acids, especially the oxygenated muriatic acid.

The following draught will be often beneficial; (æt. iv.)

Sod. mur. gr. x. Succ. limon. q. s. Spt. æth. nitr. ℥ x. ter indies.

To remove the ashy sloughs, the gargle (¹), or the chloride solutions with honey.

If, to remove local symptoms, blisters are adopted, it is best to remove them after four hours, and reapply them if required, in the vicinity, in the course of eight or ten hours. If long applied, blisters rapidly slough.

In the malignant form it is most essential to support power. Ammonia should be freely given after the excitement has begun to subside, and in some cases it will be essential to administer wine at this period.

In cases where the coryza and otirrhœa are fetid, this lotion should be used,

℞. Liq. chlor. sod. (Lab.) ℥xij. : Aq. dist. ℥vi.

I have seen the bals. peruv. also very useful.

If gargles are inadmissible, the following fumigation may be employed,

℞. Sod. mur. ℥x. : Manganes. pulv. ℥iv. : Pot. nitr. ℥ij. : Acid. sulph. ℥j.

The most usual sequelæ of scarlatina are anasarca, ascites, hydrocephalus, and pulmonary disorders; it is evident that on the subsidence of the eruption our efforts should be directed to obviate these, especially to guard against cold and damp, which are so often followed by effusion, the first evidence of which is usually brown and albuminous urine.

Belladonna in some degree indisposes children to the influence of scarlatina.

VARICELLA.

Variola spuria—Variola pusillæ—Bastard-pock—Glass-pock—Swine-pock—Chicken-pock—Hives.

The vesicle of a specific, slightly contagious, and epidemic disease, occurring once during life.

After slight febrile symptoms of three or four days, small pink spots appear on the neck or breast. On the second, or morning of the third day, and sometimes on its very first appearance, it is a distinct pellucid vesicle, without an indurated base, which enlarges, and is filled with a pearly or yellowish fluid about the fourth day: it then begins to subside, becoming flaccid at the edge; and on the fifth or sixth day brownish yellow crusts are formed.

The cicatrix of the mild forms of chicken-pock, which are seated *between* the cuticle and the corion, produces no permanent marks; but the severe and confluent forms (the vesicle dipping deeply into the corion) are followed often by very extensive pitting.

It is difficult to compare varioloid and varicellous vesicles, and their attendant symptoms, without leaning at first to the opinion of their almost identity; the terms conoid, lenticular, and globate, and chicken-pock, swine-pock, and hives, being chiefly distinctions of

form and of degree. When, however, the progress is marked by the periods above stated, it is useless to refine our distinctions too much. The question of contagion is however one of importance; as varioloidea may communicate true small-pox to a person predisposed or not defended, while varicella cannot. I shall discuss this point briefly when writing of variola.

The term globate is very descriptive, varicella sometimes assuming the form of a vesicle a quarter of an inch in diameter, the fever being severe, successive crops of vesicles appearing and coalescing, each crop being marked by a febrile paroxysm, some inflammatory action extending to the fauces, with hoarseness and difficult deglutition. This is sometimes attended by convulsion.

I have seen a somewhat severe form of roseola synchronous with varicella, both running a regular course.

Treatment.—In mild forms, a laxative and light diet. In the more severe, attended by local inflammation, leeches should be applied, but merely to subdue acute action; without reducing the system, so that convalescence should be retarded.

VARIOLA.

La petite vérole—Small-pox.

The characteristic vesicle¹ of a specific, contagious and infectious fever, communicated by variolous lymph, or contact of or exhalation from a variolous body, or infected clothes, &c.; occurring usually but once in life, subject, however, to exceptions on this point.

Natural variola is marked by four periods or stages:—

1st. The period of *incubation* of the variolous germ comprehends about fourteen days from the exposure.

Premonitory.—The febrile affection commences with languor, drowsiness, yawning, shivering or chilliness, pain in the head and loins, and the belly on pressure, vomiting, and sometimes bilious diarrhœa, often an evening exacerbation of rigour, and flushing, white tongue, with red points and edges, dyspnœa, hoarseness, and sneezing, occasionally spasmodic twitches, and sometimes epileptic fits, attended by swelling of the face, flushed eyes, and epistaxis.

2d. *Eruption.*—The symptoms continue to increase until the third, or morning of the fourth day, when a peculiar odour exhales from the skin; and in plethoric children, a premonitory roseola appears, which indicates the severity of future symptoms: the disease is now decidedly infectious.

Small papulæ are now visible on the face, (alæ of the nose and lips,) and subsequently on the breast, becoming on the second day more globular and whitish, with a pink base. On the appearance

¹ The papulæ, both of variola and vaccinia, become vesicular, containing specific lymph, the vesicles in the last stage becoming more or less purulent, or containing an opaque puruloid fluid.

of these spots, the febrile symptoms remit, and often subside about the fifth or sixth day. At this period the papula changes to a semi-opaque vesicle, becoming usually, especially about the face, slightly depressed in the centre, in consequence of the six or eight communicating cells, of which it is composed, being united in the centre; around it is a bright red margin, and a fainter blush more extensively spread. At this period we may have a slight fresh crop of papulæ, so that we see pimples and vesicles intermixed.

3d. About the eighth day, the face and some other parts of the body are tumefied from effusion between the pocks, the eyelids are swelled, there is inflammation about the fauces, and often a flow of viscid saliva, the vesicles become more opaque, and bloody urine is usually passed; on the ninth or tenth day we often observe dark spots on the face, the pustule is of a straw or cream colour, and becomes as it were one purulent cyst, by the breaking up of the partitions: the disease has attained its acme.

On the tenth, eleventh, or twelfth day, the tumefaction of the face and the pyalism begin to subside, when swelling of the hands and feet often occurs. At this period, the stage of maturation, there is a recurrence of febrile symptoms, heat, chills, and turbid urine, (secondary fever,) which symptoms subside as the process of scabbing advances; most of the pustules spontaneously burst, and are concreted into a dark brown circular crust.

4th. *Desiccation*.—About the fourteenth, fifteenth, or sixteenth day, the incrustations of those pustules which have not been absorbed, or scaled off in laminæ, drop, and leave the subjacent skin of a crimson or purple hue; from its deep seat in the corium itself, permanent marks are produced, slight, and almost imperceptible, or deep and extensive, according to the mildness or severity of disease.¹

The confluent form of variola is more rapid in its progress the first three periods, being one, two, or three days earlier; roseola usually marks its commencement, the fever is of a typhoid or adynamic character, with rapid wiry or thready pulse; indeed the symptoms are altogether more intense. The eruption is usually early on the third day or sooner, and the bases of the confluent pocks may be individually felt: swelling of the mouth and pyalism take place early; about the seventh day there is a silvery surface on the pocks, which are filled with a brownish ichor, and about the eighth or ninth, the face is so tumid, that the features are lost, the eyelids are glued together, and there is a sensation of bursting in the skin, the digestion becomes disordered, and the brain oppressed; the urine is often bloody. This, the period of maturation, is most to be dreaded. Desiccation advances rapidly, and the surface is as it were incased in a brown or livid crust, dropping off in a few days in extensive flakes. The saliva is often so viscid as to re-

¹ The pustule produced by tartarised antimony so much resembles variola, that caution must be observed and inquiries instituted, to prevent imposition.

quire being wiped away from the fauces and lips; there is often delirium, and the cerebral disturbance lapses into arachnitis or apoplexy, and frequently diarrhœa, sometimes terminating fatally. The cicatrix of the extensive ulceration left by the falling off of the flakes is not pitted, but deeply scarred or seamed.

The disease is less severe in children than adults, the plethoric and scrofulous usually suffering the most; the danger is in proportion to the extent of eruption, its confluence, and degree of symptomatic fever, especially if this continues after the eruption is complete. The most unfavourable signs are coma and delirium, the pustules flattening, or having a pale or livid disk, intense roseola or petechiæ, very sudden subsidence of the ptyalism and facial swelling without consequent tumefaction of hands or feet, and profuse hemorrhage from the nose or intestines.

The pustules of small-pox are seldom seen below a certain point in the œsophagus or trachea.

Inoculated variola.—On the close of the second day a minute hard papula is formed; on the next day a tingling sensation is perceived, and the apex of the pimple is more globular or conical; on the sixth day it becomes a vesicle, surrounded by a bright pink circle, slightly depressed or flattened in its centre, which becomes more opaque, and of a pale violet or dull straw colour. The lymphatics are inflamed, the axillary glands painful, and slightly tumid. The pustule now becomes still more flat and irregular in its form. Between the fifth and seventh day of the eruption, the fever commences, the roseola spreads, and small vesicles arise around the parent pock, which still increases in size; it does, however, sometimes pursue a *solitary* course. On the eighth or ninth day the fever is increased, there is a red tongue, sore throat, and often profuse diaphoresis; this is the most dangerous day, till the twelfth: the secondary vesicles multiply, and now often become general, the roseola is intense, often encircling the limb. On the tenth day the vesicle is completely opaque, of a straw colour, flaccid, and flatter, and centrally deeper, the gelatinous fluid exudes and concretes, while small secondary vesicles continue to arise. From the thirteenth to the eighteenth day desiccation and incrustation proceed, the symptoms decline about the eighteenth, and about the twenty-fourth day the crust drops off; this is the course of the parent vesicles. The secondary obey a quicker change, and fall off two or three days earlier, all leaving more or less depression. In some mild cases, ten or twelve days may complete the course of the inoculation, in others the pocks become confluent, and prove fatal.

If variolous pustules penetrate below the pit in the corion, in which they are usually imbedded, they may destroy the capillary and sebaceous pores, deranging the circulation and glandular function.

Superficially, too, we have sometimes an agglutination of the capillaries, (Bayuham's membrane.)

The efflorescence around the variolous vesicle will sometimes

become severe, producing an erythematous inflammation, intense, and indeed dangerous. The causes are analogous to those of the intense roseola around the vaccine vesicle, and the treatment should be similar.

In examinations of fatal cases, we discover some of the following morbid changes:—

In the alimentary canal, little or no eruption beyond the fauces, increased vascularity of the cerebral vessels, and traces of inflammation in the membranes of the thorax and abdomen, effusion of serum, and opacity of membrane in the ventricles. The usual causes of death I believe to be congestion of the brain and its membranes, or, pulmonary engorgement; very commonly, too, inflammation of the lining membrane of the air passages, and this is excessive when little cutaneous eruption appears. In some, we see signs of pneumonia, the trachea and the larynx being marked with dull crimson patches, and perfect variolous vesicles, not extending, however, to the bifurcation of the bronchi.

I believe the variolous fever may prove fatal, without any pock or external sign of its presence.

Variola is usually characterised by *singleness of attack*: there are exceptions. As perfect vaccination is not an invariable preventive of small-pox, so neither is variola itself; indeed, variola has occurred five times in the same subject, and twice subsequent to vaccination; but, as regards the comparative prophylactic, or modifying power of the two diseases, I may assert that cow-pock will sometimes effect a security which variola had failed to do, and variola itself will not impede the course of subsequent vaccination. The cases of small-pox, after apparently perfect vaccination, have been so numerous as to shake the faith of many in its eligibility. They yield too much to prejudice who are thus influenced.

The cases of variola after inoculated small-pox are, I believe, more frequent than after perfect vaccination, the cases of secondary small-pox being usually severe, often fatal. Of this fact, I could cite many cases, and one especially, where a vaccinated infant slept in the bed with a child which died of secondary small-pox, escaping unhurt.

This leads me to the difficult consideration of the real nature both of variola and of its mules, those secondary or modified diseases which have opened so fertile a field of discussion; I shall, however, allude very briefly to the varioloid epidemic.

The occurrence of vesicles, some resembling a blighted crop of variola, with more or less of fever, other thinly scattered and unattended by fever, has been of late not unusual; from varicella, indeed, it is often very difficult to distinguish this modified vesicle. The modified character of varioloidea has been referred to the controlling influence of vaccination, and experiment has fully proved it. Analogy, too, strengthens the opinion by the relation of cases, where small-pox has been modified in its character by syphilis, and in Dr. Jenner's practice, by epidemic typhus; while,

on the contrary, the prevalence of variola has changed the character of other diseases simultaneously occurring.

Some pathologists *may* have mistaken varicella for varioloidea, and *vice versa*.

There are, however, certain decided distinctions between that which we term varioloid disease, and varicella, as regard its character and its seat.

Now it is certain that small-pox and cow-pock, if originally the same, are now antagonists; it may be an illustration of the *similia similibus* principle.

The vesicles of variola and vaccinia may run their course together, each being usually modified and mitigated in its degrees; under these circumstances, the lymph from each vesicle will produce genuine disease in another subject, although the vaccine in *such case* is evidently not decidedly prophylactic, and the variola, thus modified, may, by circulation in others, produce severe confluent and fatal small-pox.

It is evident that two diseases may be *in different degrees of activity* co-existent.

During the *incubation* of variola, I have seen perfect vaccination effected; it has run its course, towards the term of which small-pox has made its appearance; and I have known measles and scarlatina under the same relative circumstances regarding small-pox. I have seen, too, in three instances, small-pox suddenly appear in children who had the crusts of perfect and very fine vaccine then dropping off. In these cases, the small-pox was of the mildest character, and shorn of its secondary fever, its pyalism, its bloody urine, and other marks of severity; still these vesicles might respectively produce, by inoculation, their own peculiar disease. Other cases have been presented to me, in which, I was told, the two diseases were progressing together, each in its perfect state. This I believe to be an error. The vaccine vesicle takes on the variolous nature, ere its own influence on the system could be felt; or insulates itself, and, by concentration, reserves sufficient power to resist fresh actions only in its vicinity.

This co-existence of two diseases is not inconsistent with the principles of our pathology; it may be illustrated, perhaps explained, by one of the following propositions:—

1. The germ of one disease is in abeyance, while another is developed.
2. One disease dwindles and ceases to be action, the *debris* acting as a predisposing cause.
3. One action overcomes the other; or one is constitutional, the other local.
4. The blending of two actions forms a third.

With respect to the prophylaxis of vaccine, its controlling power over variola, I would express my opinion in the following sentence.

I believe that usually where the genuine vaccine vesicle has attained its sixth day in perfection, during, of course, the incubation

of variola, its influence will be evident on the variolous symptoms; the vesicles will not mature, they are blighted. If vaccination be performed even five or six days before the premonitory symptoms of small-pox, there may be a temporary struggle, but the latter will be predominant; and vaccination is wholly inefficacious, if the constitutional symptoms of small-pox have commenced ere it was performed.

Small-pox will sometimes occur *locally*, on the nipples of nurses, from the contact of the lips of a diseased infant. It may be communicated by the diseased mother to the child during gestation, and it may also contaminate the fœtus of a pregnant woman constantly nursing variolous patients, without any external signs on the mother herself.

Treatment.—Dependent on the mild or severe form, and the changes during the successive stages of the disease, and the accession of coincidences during its course.

The great principle of treatment, however, is the refrigerant plan adopted by Sydenham, perhaps from a hint of the practice in Hindustan and Arabia.

If, from the sequence of characteristic symptoms subsequent to exposure, we suspect the developement of disease, advantage will be derived from sponging the body with vinegar and water, or, in weakly patients, immersion in the tepid bath.

On the occurrence of the headach and languor, a gentle ipecacuanha emetic should be given, and a mild aperient a few hours after. If the primary fever be slight, subacid fluids, thin arrow-root, or tapioca, or mashed turnip, should form the diet. The chamber being kept moderately cool both in summer and in winter; as little light as possible being admitted.

If the excitement be severe, the pulse upwards of 100 and full, and especially if there be congestion about the brain and lungs, moderate abstraction of blood must be effected; and if these symptoms should continue, where from debility or repetition of bleeding further abstraction is inadmissible, dry cupping, and warmth constantly applied to the feet and legs, the head being kept cool by æther lotion. Slightly acidulated gargle to the fauces.

The course of the pustule may be somewhat modified by an absence of light, and materially so by an application of argent. nitrat.: on the first or second day a strong solution being applied on the vesicle; at a later period the surface or apex being previously detached by a silver needle. I believe that the pitting and marking will be much lessened and sometimes prevented altogether by this plan.

In the varioloid, as in the mild and distinct variola, fever and local symptoms should be carefully regarded, and the mode of treatment should resemble that adopted generally in those affections idiopathically occurring, with this special caution, that as much power should be preserved, if possible, as will be adequate to the support of the system at and after the period of maturation, and to

restore the impaired strength. We must not push depletion, as in *idiopathic* cases, until local symptoms yield.

In the severe and confluent forms depletion is sometimes absolutely essential, but the proper period of its employment is very short, as prostration and sometimes collapse often very speedily take place. Under this condition relief will often be obtained from spt. æth. c. in mist. camphor.

In violent febrile action, with intense heat, sense of suffocation, jactitation, and delirium in extreme degree—a state of great danger—the cool bath may be employed.

If the skin at any time becomes cold and pallid, the pustules flaccid and flattened, and especially if difficulty of deglutition and breathing increase, (symptoms of internal congestion,) it is essential to employ warm fomentations, or the warm bath; and if convulsion should supervene, Tr. asafoet. in mist. camph. and sinapisms should be applied for a few minutes to the feet.

About the period of secondary fever the mild antiphlogistic plan should be repeated, as the symptoms soon remit. If, however, they continue long, the prognosis of its termination will be unfavourable, as the febrile action will probably soon assume the typhoid character.

During the height of the disease the chamber should be sprinkled with a solution of the chloride of lime.

In this form and stage, and especially if we have excessive prostration, or the *malignant* form, as it may be termed, it will often be essential not to delay the administration of wine, quinine, and the mineral acids, in infus. ros. or mist. camph. and opiates may be even required, the best form of which is the acetate of morphia.

Diarrhœa will often occur during the progress of variola, chiefly from checked perspiration, or from flattening of the vesicles. To a moderate extent this flux will be salutary; the employment of astringents and opiates must be left to discretion.

On the subsidence of the disease, neglect and exposure often induces secondary or local affections; often formidable, sometimes fatal. In other cases the constitution remains debilitated, and decline or marasmus may be the result. Abscesses will also frequently arise.

Many of these affections are the result of a transference of action from one part to another, and therefore the establishment of a drain for a time, as a blister or issue, will obviate this effect. In other cases the destruction of the transpirable property of the skin, by extensive and firm cicatrization, may be the cause. This, of course, is irremediable, except in a degree by ensuring a healthy and energetic state of the secretions; and the condition of systematic debility, or a protracted convalescence, may be remedied by pure air and frequent gentle exercise.

VACCINIA.

Vacciola—Cow-pock—Pap-pock—Kinc-pock—Vaccine disease—Grease.

A vesicle of a pale pearly-white colour, communicated by inoculation only, and marked by almost uniform changes.

The origin and distinct nature of cow-pock is still a subject of much dispute. One pathologist will be of opinion that variola and vaccinia are identical, *i. e.* varieties of the same disease, (Dr. Jenner himself inclining to this thought,) and this based on the fact of having produced successively the variolous and vaccine vesicles from the same source. Another, that the juices of the cow give to variola the properties of vaccine. A third will identify the two with varicella. Another separates the vaccine, and decides that variola is the severe form, and varioloidea and varicella the modified and mild, or non-febrile forms, of the same original disease.

Again, we are told that in some rare instances the vaccine vesicle has arisen *de novo*, without the possibility of inoculation, and from it a succession of genuine and effective vesicles were produced in other subjects.

Some assert the vaccine sore to be a strumous ulcer, while others affirm the certain consequence of deformity—the facies bovilla, &c.

And again, it is asserted that the lymph which we are now circulating is become too much *humanised* by its passage through so many human systems, since thirty years ago, it emanated from the great *dairy* source in Gray's Inn Lane. The production of a *perfect* vesicle and cicatrix, I believe, is enough to disprove its contamination and loss of prophylactic power from *this* cause.

It is useless to discuss these points; but I may observe that the surest proof of the non-identity of vaccinia and variola, is the modifying property of the former over the latter. Variola does *not* mitigate variola, the secondary attack being of equal severity with the primary.

In forty hours from the insertion, a small pink spot appears, changing on the fourth or fifth day to a bluish, and on the fifth or sixth to a pearly vesicle. On the seventh or eighth it assumes an annular form, having a slight depression in its centre, and is surrounded by a pale rose-coloured ring. A distinct elevated border is formed at its edge, consisting of a number of small vesiculæ in distinct cells. On the ninth day the rosy blush has spread, and on this or the tenth has attained its acme, being accompanied by hardness of the arm and axilla, and marked by crethism or fever. This is usually a proof of constitutional impression, and during its influence, lymph inserted in the same subject is more active and speedy in its effect.

The lymph, if the cells are emptied in the acute stage, is very quickly secreted; and I believe this rapidly secreted lymph is the most active in its influence.

About the twelfth day an eschar is forming in the centre of the vesicle, changing ultimately to a dark brown concave crust, leaving,

on its falling off, a whitish mark or cicatrix on the skin—indented, spotted, and radiated, and permanent in the cutis vera.

This is the usual course of the genuine vesicle; but it may, from various causes, remain *dormant* ten or twelve days, and during the cold months its progress is often retarded, so that nearly a week may be added to the period of its duration, each stage being procrastinated; and in some cases the vesicle is altogether blighted; it is flat, minute, flaccid, and its prophylactic property destroyed. It is possible, too, that with every mark of perfection the vesicle may be merely local. The only *proof* of its having influenced the constitution, is by the test adopted by Mr. Bryce:—On the fifth or sixth day of vaccination lymph is inserted into an opposite arm; if the vesicle from the latest puncture overtake and run its course with the first, the process is complete.

With regard to the mode of insertion, the rule is simple. The lymph should be received, not earlier than the sixth nor later than the ninth day, on a clean lancet, and inserted beneath the cuticle *obliquely*, without producing hemorrhage. I believe that the insurance of one perfect vesicle on each arm, with all their *character* and *periods* distinctly marked, is sufficient. I am aware that it is the practice elsewhere to insert the lymph by as many as twelve or twenty punctures; but my own opinion is, that we should judge by intensity of degree rather than by extent of number; if not, each portion of the body should be simultaneously submitted to the same process.

The vesicle should not be too profusely drained, as *serum* merely may at last exude.

The season I should select for vaccination is between April and October, when the temperature is varying from 60° to 70°. The infant should be at least three months old, and it should be at the time in good health, its skin free from rank or specific eruption, (mild red-gum being of no consequence,) and the system may be prepared for inoculation by two or three doses of gentle aperient.

Of course the most eligible plan of transfer is immediately from the fresh vesicle; it is rare indeed that, with due care, this mode will fail. If this cannot be, I would advise the hermetically sealed tube, containing fluid lymph; the points of broad lancets armed; then the armed threads; then the glasses, the virus on which must be moistened with *cold* water; and, lastly, the powdered crust rubbed into transverse scratches on the arm.

I have spoken of the checked or blighted vesicle, as cow-pock is alike subject to variation with other diseases; there are also a variety of spurious pustules produced by various causes, such as fever, or the otherwise ill health of the child; diseased action of another sort already set up in the part; dry or depraved lymph; hasty or injudicious punctures, or with a rusty lancet; or a disturbance of the regular progress of the vesicle in its early stages. The character of the spurious vesicle is usually either a ragged, flat, and brownish sore, resembling, indeed, the severe ulcerations

on the milker's hands in dairy countries, or an acuminate pustule, resembling the common festering produced by a thorn. Particular parts of the skin, that on one limb for instance, may from disease or inaction be indisposed to perfect vaccination, while other parts are with facility infected.

I have before expressed belief that, although two actions cannot be perfectly established in one part at one time, we may have a certain admixture of lymph, producing a spurious or hybrid vesicle—vaccine lymph may, for instance, be inserted into an herpetic vesicle. In squamous diseases, too, a sort of straw-coloured vesicle is formed, capable of propagation of a similar vesicle.

I may add, that vaccine will modify and mitigate the symptoms of other diseases; even pertussis has been apparently mitigated by vaccination, proving it thus a valuable palliative, but perhaps at the expense of its own energies.

In some children, apparently healthy, there are *latent* causes of insusceptibility. I vaccinated one child four times ere I succeeded: Dr. Walker having previously failed five times in the same subject.

As vaccination may be prevented, so may it be suspended by other diseases. The lymph has been inserted three or four days before the eruption of measles, which have run their course and subsided, and at this period the vaccine vesicle has arisen, and also then run its course with perfect regularity. Usually, however, the effect of measles or scarlatina on the vaccine vesicle is to essentially modify it; it may form and even mature, but it will have no *areola*.

Experience has made us sensible of the failure of vaccination in fulfilling *all* the promises of Dr. Jenner; under the most favourable circumstances, I believe it *has* sometimes forfeited its claim to the title bestowed on it in its infancy, "a complete preventive of variolous contagion." The number of cases of *variola post vacc.* may be increasing, but the yearly increase of vaccination will account for this. It may be true, indeed, that death *has* ensued from a dependence on the process of vaccination; but these cases are infinitely fewer than those where death has been the consequence of variolous inoculation, even under the most favourable state, and most judicious treatment. Is it not, then, giving the patient a chance of escaping that disease, which, even if it do then occur, is to an excessive degree milder in its form than small-pox, communicated by inoculation, without previous vaccination, and marked by little, if any more severity than small-pox communicated by inoculation, subsequent to vaccination?

Even when the *variola post vaccinationem* is most extensive, and even semiconfluent, the first and second fever will often be far less than in cases without vaccination, with a far less crop of pustules; and this throughout one family or community.

But as the converse of this, we have many cases of secondary small-pox, and I could cite many instances of the triumph of cow-pock over variola itself as a preventive, in my own practice as well

as that of Dr. Bateman and other pathologists, and especially in Dr. Forbes's account of the Chichester epidemic of 1820; the records of the Military Asylum, at Chelsea, &c.

For these causes, then, and the assurance that the proportion of lives saved from small-pox, since the introduction of vaccination, is about 74 in each 1000; the reflecting philanthropist cannot inculcate variolation, which, with all these comparative disadvantages, creates a new focus of infection, thereby multiplying the sources and chances of *natural* small-pox.

I believe that the susceptibility to infection will recur at a certain indefinite period after vaccination, perhaps it may be *gradually* increasing; it is therefore well to revaccinate at the end of five or seven years. I believe within six months after perfect vaccination variolus inoculation will produce rarely a vesicle of more than four or five days' duration. After twelve months even, the inoculated small-pox is not in my own experience attended by secondary fever; it usually produces a perfect pustule, (locally,) which drops off between the sixth and eleventh day.

Although the febrile excitement symptomatic of vaccinia seldom exceeds the degree of erethism, yet in some cases a rose or crimson blush will surround the vesicle about the sixth day, attended by considerable fever, (erythema, or roseola vaccinia,) arising from extreme irritability of skin, or too deep an incision.

To this should be applied poppy water, with liq. plumb. ac. dil.; and if there be signs of extreme irritation, restlessness, and screaming—indeed, a sort of secondary fever—warm port-wine and water fomentations should be applied, and acid. sulph. arom. with syrup. papav. thrice in the day should be administered. I have employed with benefit equal parts of U. hydr. and U. plumb. thinly spread on soft rag. The bowels should be opened by castor oil. If we see the aréola very red and irregular, rapidly spreading before the sixth or seventh day, with high fever, it may be well to touch the vesicle lightly with lunar caustic or sulphuric acid, on a probe, and thus to destroy its progress, and subdue the irregular action, revaccinating under a better state.

In some cases there will be a reappearance of the efflorescence, even at the thirteenth or fourteenth day, requiring brisk purgation, and a lotion of liq. am. ac.

I have seen, also, a large bluish or reddish bulla rapidly arise, instead of the true vesicle, and I am disposed to think that it may be referred to some acute internal disease in the system, in consequence of one or two children being, under this state of the arm, carried off by pneumonia, &c., while others vaccinated from the same vesicle progressed most favourably.

If the crusts degenerate into indurated or horny substance, resembling rupia, a common poultice should be applied till they are detached.

On the complete subsidence of the aréola, two or three laxative powders should be given at intervals of two or three days.

SCABIES.

Psora—Le gale—Itch.

A contagious disease, marked by subacute inflammatory action; existing under three distinct forms of eruption, which, indeed, may appear *simultaneously*—papulæ, vesicles, or pustules; modified as to acuteness, resistance to remedy, or quality or power of infection, chiefly according to the nature of constitution.

Like some other contagious eruptions, in a cachectic condition, or by neglect, it may possibly be generated *de novo*; the usual mode, however, is by contact, and the first crop appears commonly in the flexures of the joints, or heated parts of the body.

SC. PAPULIFORMIS.

Sc. porcina—Pimply or rank itch.

Minute, acuminate, dusky, or dirty pimples, attended by intense itching, always increased by elevation of the temperature of the skin. The act of scratching converts the papulæ into blackish spots, and causes numerous red parallel lines in clusters. It is distinguished from prurigo by its more acuminate papulæ; by its appearing first in small clusters, and chiefly on parts most subject to heat, friction, or contact; and of course by its contagious quality.

SC. LYMPHATICA.

Watery Itch.

Transparent vesicles with very little surrounding inflammation, almost exclusively appearing about the flexures of the joints, attended by severe itching; on the bursting or abrasion of the vesicle, a small brown crust is formed.

It is distinguished from herpes and eczema simplex by its more acuminate vesicle, by its contagious quality, and its usual position; by its producing an *itching*, and not a *tingling* sensation, and by its appearing at any season of the year.

SC. PURULENTA.

Pocky itch.

Large, circular, lemon-coloured pustules, marked by an extensive inflammatory blush. The pustules sometimes (by neglect) coalesce, ulcerate, and are converted into a firmly adhering, dark brown scab. It is distinguished from the pustules of impetigo and porrigo by its peculiar *globular* form, and by its less copious incrustation, relatively to its pustule. From the phlyzacia of ecthyma, (which in their early stage resemble this scabies,) by the itching and aggravation by heat.

When the disease arises without evident contagion, it assumes the papular form; and it is also more prone to recur, unless constitutional treatment be continued for some time.

There is doubtless an insect sometimes found (*scabies vermicularis*) in or close to a vesicle, peculiar, although I believe it not essential, to scabies. It is usually seen in those cases which have been neglected. They are discovered in a small spot near a pustule, to which it is connected by an irregular dotted line, the course of the burrowing march of the insect. If this spot be pricked and carefully examined, the insect, somewhat resembling a cheesemite, may be abstracted on the point of a needle.

Treatment.—In recent cases there can be no objection to a rapid cure of scabies. When it is of long standing, internal remedies are essential to its safe eradication.

Sulphur is the basis of most of the formulæ which have been proposed as remedies. In the very mildest cases of lymphatic scabies, the internal use of sulph. precip. thrice in a day, with warm bathing, will often be successful. In the more inflammatory forms it will often be best to commence the treatment by the reduction of inflammatory action. Emollient poultices, or warm ablution, brisk purgation, and even leeches; the efficacy of specific remedy will be instantly increased by this plan.

In cases of cachexia, and derangement of general health, it will often be essential to combine tonics with gentle purgation and the topical remedies; indeed, much discrimination is required in adapting to these various forms and conditions.

The most congenial plan for either form of scabies, is sulphur fumigation, or the following lotion :

℞. Potassæ sulphuret. ℥j. ad ℥ij. Aq. ℥j. M.

℞. Acid. muriat. ℥j. Aq. distill. ℥j. Misce ℥j. sing. lot. cum aq. fontana ℥iv., et lava spongia.

℞. Sulph. sublim. p. ii. Potass. pur. p. i. Adip. p. viij. ter indies utend.

Internally,

Sulph. lot. gr. v. ad ℥j. Tartr. potass. gr. iv. ad x. Lacte ter indies sumend.

In the moderate forms of scabies porcina :

℞. Hyd. oxyd. alb. ℥j. Adip. ℥iv.

I add other forms of local remedies, because one will succeed often where others fail.

℞. Flor. sulph. ℥v. Ol. olivæ ℥iv. Aq. ℥j. Pot. subcarb. ℥ij. Solve potass. aq. tepid. Adde Ol. deinde sulph. Adde camphor. ℥ij.

℞. Pulv. rad. veratr. a. ℥j. Hydr. precip. alb. ℥ij. Ol. limonis ℥ss. Adip. ℥xij. f. ungt.

℞. Zinci sulph. lact. sulph. bacc. lauri, p. æq. Ol. q. s. ut f. ungt.

℞. Potass. sulph. ℥iv. Aq. dist. ℥j. Ac. sulph. ℥ss. M. Bis indies utend. pro dieb. sex.

SYPHILITIC ERUPTIONS.

Secondary Symptoms.

The question regarding the syphilitic nature of infantile eruptions is one of extreme delicacy, involving often the destruction of domestic peace ; the expression of opinion should be guarded, even if a chancre, or secondary sore, be proved an effect of parental contamination.

The primary sore is seldom seen in the child, the secondary forms are not uncommon among the lower orders, assuming the character of spots, or blotches, pimples, bullæ, crusts, scales, condylomata, which it is not easy to distinguish from eruptions on cachectic children. The child may be infected during its development within the womb of a diseased mother ; or in its passage through the vagina.

Intra-uterine syphilis usually assumes the character of red or brown, or of extensive fawn-coloured stains. Infants are, however, sometimes born, either prematurely or not, with ragged ulcers ; while others are expelled dead, with a peeling cuticle, or gangrenous extremities, perhaps not an unfrequent cause of *blight*, or abortion. The mother may not be *apparently* diseased, she may have lost the external marks for some months, and yet infect her child. How far disease may be inherent in the ovum, or the semen, involves a more subtle question.

When the vagina has communicated the disease to the child, a straw-coloured discharge will often flow from the child in about a week ; a few days, or even weeks, elapsing ere the eruption appears.

The most common form is psoriasis or lepra, commencing in a whitish or pink spot, or pimple, which terminates in thin films ; if neglected, it will become an ecthymatous ulcer, or copper-coloured, or blackish crust, surrounded by a purple margin. The scales of syphilitic lepra are very dark, and they begin to heal at the circumference.

The crusts will re-appear as often as they are detached.

When the papulæ appear about the verge of the anus, continual moisture and action prevent the formation of a crust ; an indurated, irregular tubercular swelling, condyloma, being the result. These swellings will, however, sometimes form in the *dry* folds of the thighs.

These forms of disease must always be suspected, and our diagnosis may be almost confident, if we have, superadded, tumefaction of the nose, and a discharge of yellow, viscid, and speedily inspissated mucus ; and above all, if there be indications of pain in the cylindrical bones.

Infantile syphilis will infect the nurse.

Treatment.—If the mother be evidently infected, the ioduret of mercury should be freely given to her ; the child will be influenced thereby, through the medium of the milk ; it is true, the milk may be thus rendered less adapted for nutrition, but it is essential, unless

the child is removed to another breast. In that case, and it is the safest mode, the hyd. cum. cret. should be placed on the tongue, or the gums rubbed with it night and morning; this, however, with caution, as the salivary glands may remain uninfluenced, even while an absorbent action is set up in the bones of the mouth, or the alveolar process, and exfoliation be the result. This effect is, however, rare.

The black wash, with or without poultice, will be the best local application to the crust, ulcer, or condyloma, the other forms need only defence. The sublimate bath (³) will be beneficial.

I need scarcely allude to the necessity of pure air, exercise, and nutrition.

ON DISEASES CONSEQUENT TO EXTERNAL IRRITATION.

ENCAUSIS.

Burn and Scald.

Lesion, from the contact of heated solid, fluid, or vapour; the degrees of acuteness of its symptoms, and the consequent danger, depending chiefly on the extent of the injury itself, the importance of the parts injured, the state of health, sensibility, or excitability of the patient.

According to the extent of the lesion, we may divide the burn or scald into three degrees—superficial, ulcerated, and sphacelated.

Superficial. This may consist in simple erythema, or redness, or in slight vesication, accompanied by little pain, and but transient erethism.

If, however, the superficial extent is large, and the injury (though in itself slight) has occurred on delicate, or vital organs, as the eye or larynx, the symptoms will become *relatively* so severe as even to endanger life.

Ulcerated. Abrasion of a more or less extensive vesication, usually attended by rigour, succeeded by flushes and other marks of febrile action, restlessness, convulsive twitchings, sometimes by collapse, or by extreme constitutional irritation; when, from extensive or deep ulceration, the extremities of nerves have been largely denuded, this may be followed by extreme prostration, by coma, delirium, and other marks of cerebral disorder, terminating occasionally in death.

Sphacelated. An eschar formed, and the parts deeply burned; the tissues being often converted into one black encrusted mass. In this case the injury has been usually so severe, that the collapse will be extreme, death taking place quickly, from a depression of nervous energy beyond the power of *reaction*.

Treatment. First Degree.—To subdue or prevent inflammation by cooling applications, as cold water, liq. plumb. dilut., or flour strewed over the part; spt. rectificat. dilut., if any vesication has occurred; adding ol. amygd., if the injury be near a joint, so that contractility may be obviated.

If the burn or scald be in, or near to the eye, or the fauces, leeches should be applied if pain or heat rapidly increases, for the *slightest injury* to the glottis may be productive of severe, even fatal, result.

Cooling laxatives, and the lightest diet.

Second Degree.—If the injury is slight, the application of liq. calcis, and ol. amygd., or ol. lini, with attention to the state of the bowels.

If an approach to collapse, brandy and ammonia must be immediately administered, to effect reaction of the circulation.

In deep and extensive injury, the most efficacious applications are finely carded cotton wool, or fine and pure flour. The wool should be kept on the abraded surface, four, five, or six days; it forms, with the discharge, an artificial covering to the denuded nerves, thus obviating irritation; and being in itself a non-conductor of heat, it prevents excessive expenditure from the surface.

The cicatrization is speedy, there is little or no contraction of cuticle, the new skin possessing more of its normal character than the usual cicatrix.

The flour should be dredged over the surface every morning, for a few days.

On the separation of the crusts, simple dressing should be applied.

Excessive febrile excitement, or extreme prostration, or restlessness, should be relieved by cooling, tonic, or anodyne remedies.

In restlessness, with a tendency to coma at intervals, the Tr. benzoin. c., dropped on the part, will often procure quiet.

Third Degree.—If there be collapse or prostration, the patient should be immediately placed in a warm bed. If the eschar be slight, I would adopt the plan proposed for the second degree. If the injury be destructive of the soft parts, and only then, the ol. terebinth. should be applied warm to the burnt surfaces, for two or three days.

On the separation of the crusts, the abraded surface should be dressed as in the second degree.

If the bone of a limb be deeply burned, the question of immediate amputation, that is, when reaction is established, is one of great moment.

The fever accompanying this degree is usually of a typhoid character, and the mineral acid should be early employed; if the nights are sleepless, *decided* anodynes must be given. The bowels should be opened by enemata, or ol. ricin. The diet should be light, but nutritious, moderately and frequently given; but, if the prostration be extreme, wine or porter must be added.

On the sloughing of dead substance, the arg. nitr., or chlorid.

calc., in moderate degree of solution, should be applied on linen rags.

To exuberant granulations a stronger solution of arg. nitr., or Tr. iodin. may be applied. If on the extremities, emp. saponis may be strapped round the limb, spaces being left for the discharge of matter from the sore. The glassy sore should be treated by lotions of the sulph. zinci, the spongy, and bleeding, and languid granulations, with arg. nitrat., or sulph. cupri.

Contractions, or hypertrophy of the integuments, will occur, especially after their destruction by burning; in consequence of less or more blood than is due being determined to them.

When contraction is extensive, or impeding the movements of the body, the diseased integument should be carefully dissected off, and a splint applied (if on a limb) during the skinning process.

In cases of hypertrophied cicatrix (cheloide) compression should be adopted, or if that is not practicable, the Tr. iodin. should be pencilled on the skin every second day.

VESICATION FROM EXTERNAL IRRITANTS.

Lytta—Gum plasters—Linseed poultice—Severe friction or pressure—Caustic—Mercury—Cubebæ—Croton oil.

Between the blister and the tender skin of children, thin gauze, or gauze paper, should be applied, or they should be removed at the third, fourth, or fifth hour. Vesication will occur, although not *then* visible.

If ulceration is deep and spreading, with irritation, fever, or convulsion, French roll poultice should be applied; aperients, and the anodyne mixture⁽⁸⁾ each fourth or fifth hour. If sloughing occur, the balsam of peru may be strewed on the poultice. If fungous or bleeding granulations arise, the arg. nitr. should be applied; and, if they are not extensive, excision with sharp scissors or bistoury.

The effect of gum plaster, or linseed poultice, will often be a pustule; friction and pressure ring the part, *i. e.*, produce a bulla; caustic is a slight burn, of the third form.

Cubebæ produce vesicles on a light vermillion ground, so also do frictions with mercurials; the biniodide of mercury, however, excites yellow vesicles, terminating in green crusts or scales.

Croton will produce vesicles, and puffing of the skin.

For these lesions, I would generally enjoin rest and the removing the sources of irritation, poppy fomentation, laxatives, and diaphoretic anodynes.

PERIÑO.

Chilblain.

A tumefaction of a deep dull crimson, or leaden tinge, accompanied by a sensation of *tingling*, often acutely aching and painful: usually occurring on the toes, or fingers, or heel, or outside of the

foot; the parts adjacent being often somewhat œdematous. The exciting cause (intense, or even moderate cold in children predisposed) is followed by congestion of the superficial vessels, the reaction, to open the capillaries, producing an inflammatory condition; which will either remain in a languid chronic form, during the prevalence of cold, or become acutely inflamed, and terminate in ulceration, sometimes penetrating to the fascia and tendons, and even to the bone.

Prevention. Sudden transitions of temperature avoided. The extremities defended from the air by wash-leather, or woollen socks and gloves; gentle friction in parts or systems predisposed, with liniment. saponis, lin. camphor., or spt. camphoræ; regulating the functions of the bowels.

Exercise.

Treatment. In mild cases, simple friction and defence, as above, with the liniments. Or the following, which is often very efficacious:

R. Tr. lytt. ℥ss.: Lin. sapon. ℥ij.: Spt. camph. ℥ss.

Adding, if the itching be intense, vin. opii ℥ss.

In unhealthy and debilitated habits the following plan should be adopted:—

The swelling to be covered with cerat. cetacei, over this to be laid lint or rag well wetted with the alkaline chlorides.

On the occurrence of vesication, an emollient poultice, the fluid evacuated by puncture; and after the repetition of poultices for three or four days, if ulceration occurs, ungt. calaminæ applied on singed rag twice in the day; the part bathed well with warm water previously to the application.

If the surface of the sore be glassy, and its edges ragged, the ungt. zinci, or lot. arg. nitr. should be applied. In very stubborn and protracted ulceration, a lotion of the chlorid. calc. will be useful.

Mild laxatives should be often given; and if there be restlessness, irritation, or pain, the anodyne mixture (⁸).

PARONYCHIA.

Onychia—Panaritium—Whitlow—Felon.

An inflammatory tumour, usually seated near the extremity of the toe or finger, near the root of the nail. It is attended by varied degrees of pain and constitutional disturbance; its degree somewhat depending on diathesis, but chiefly on the sensibility of the tissue affected, and the depth or extent of the disease.

When seated in the cutis we have the signs of slight phlegmon, heat, pain, tension, and redness, erethism or irritative fever, rapidly terminating in suppuration, marked by a semitransparent elevation of the cuticle.

When seated beneath the cutis, in the cellular web, the symptoms are more severe; the constitutional disturbance amounts to

fever, often with distinct rigors; the suppurative process is slower of course in its progress towards the surface, and often extends laterally, burrowing beneath the nail.

When seated in the theca or synovial sheaths, the character of the disease is more marked; pain is deeply seated, often intense. Fever is acute, the rigors severe, and often recurring at the onset. The swelling is more extensive, often spreading to the fore-arm or leg; distinct red lines marking absorbent inflammation, even to the axilla or groin. At this period convulsive action often ensues, and extreme restlessness, delirium, and other signs of cerebral disturbance.

From the unyielding nature of the tissues, the matter which is formed does not approach the surface, but burrows along the synovial sheaths, or tendinous thecæ, producing extensive sinuses, with thickening and loss of motion of the joints in the vicinity, sometimes affecting the periosteum, and producing caries in the subjacent bone.

Causes. It is often arising spontaneously in healthy persons, without constitutional disturbance; or from gastric disorder; or it may be critical of acute fever. External injuries, however, as contusion, or puncture, or acrid stimuli, or retention of extraneous substance, will often be its cause.

Treatment—preventive. Extraneous substances extracted; if from local injuries, poultices, antiphlogistic lotions of liq. plumb., spt., rect., and Tr. opii.; leeches; laxatives. If symptomatic of gastric disorder, this mode combined with remedies appropriate to the primary disorder. This mode will prevent developement. When critical of acute disorder it will be safer to allow their full developement, guarding the system from excitement, from local irritation, and debility from exhaustion.

Of the Cutaneous, or Superficial.

Treatment—curative. Moist warmth constantly communicated by bread or linseed poultices, or warm water. Incision, when supuration is complete; evacuation of matter; removal of the cuticle; ungt. calaminæ, over which a warm bread poultice should be applied for three hours every morning.

Of the Sub-cutaneous, or Cellular Membranous.

The incision should be deeply made through the cellular membrane even to the periosteum; and if the pus has burrowed under the nail, a portion of that should be elevated or excised. Laxatives and diaphoretics, and anodynes at night.

Of the Thecal.

The sheath freely divided with the scalpel. If the bone be carious, or the tendons or thecæ sloughing, poultices of bread and ol. terebinthinæ should be applied for a few days, succeeded by those of bread and water, or linseed; and these followed by the black or yellow wash.

If there exist a fistulous sore after a partial healing of the whitlow, the arg. nitrat. should be rubbed on the sore or inflamed parts every, or every second, morning; mild poultices being assiduously applied. In cases of exhaustion, tonics and change of air.

PTERYGION.

Fungous excrescence—Fleshy caruncle—Growth of the nail into the flesh.

A fungous growth, arising from the soft parts contiguous to the nail; the result of inflammation, often of the deep cellular membranous whitlow. The nail is seldom altered in its form or size; but as the fungus increases, it tends to increase also the morbid mass by irritation.

Treatment. Removal of pressure; rest; frequent warm bathing of the feet or hands.

In slight cases, the application of arg. nitr. every second or third day, the nail being previously pared with great care, or a small triangular piece excised from the centre of its edge, so that its *outward* pressure may be lessened.

If the fungus still increase in defiance of this mode, the nail should be cautiously cut through with a small sharp knife, without wounding or dividing the cuticle interposed beneath its under surface and the sensitive tissue beneath it; the nail may then be raised, and detached by a minute pair of forceps.

The occasional administration of calomel, or hyd. cm. cret. and the decoct. sarsæ C. may often accelerate the effect we desire.

VERRUCA.

Common Wart.

An irregular, rugose, or fissured tumour; the effect of chronic inflammation of the vessels of the cutis, in which tissue the base is seated. They often appear in clusters, and apparently spread from a sort of inoculation. They are usually inert, and free from pain; but sometimes excite an erysipelatous blush around them, or an ulcerative process, which is sometimes productive of a cure by *shelling out* the wart. They are occasionally absorbed.

Treatment. A blister applied for thirty or forty hours.

Excision, if the base be broad, and the application of caustic; or, a ligature or excision, if attached by a narrow peduncle.

If very extensive, or seated near important parts, the argenti nitras should be very carefully employed.

CLAVUS.

Corn.

An indurated and laminated condition of the cuticle, caused by external pressure: its base producing sometimes a corresponding depression in the cutis, and marked by a hard central nucleus or core, termed the "Bird's Eye." They are often aggravated by

atmospheric changes, and become acutely painful. The toes and sole are the most common seat, and if they are between the toes they are softer, from the secretion of the part. The lips of trumpeters, the fingers of harpers, and even the ear, from pressure of the ring, are sometimes affected by them. Inflammatory action, which often takes place, increases the degree of pain, but in the end renders the corn softer, and may terminate in a suppuration and *shell-ing out* of the indurated mass.

Treatment. Removal of pressure. Greatly filing the corn, and then applying a mild diachylon plaster. The most effectual mode is—immersion of the foot in warm water, paring off the indurated laminae, and then rubbing the surface with argenti nitras for three or five minutes; the process to be repeated, on the separation of the eschar, until the hardness is removed.

The paring off, or excision, must be carefully performed; a tendon may be wounded; a small joint may be opened; or inflammation, and even fatality, be produced by too deep an incision.

INTERTRIGO (Chafing.)—RHAGHADES (Chap.)—CONDYLOMA (Anal excrescence.)

Intertrigo.

Excoriation in the folds of the skin, chiefly in the groins, perineum, and neck; dependent in some degree on peculiar irritability of skin, and excited by friction, heat, or acrid moisture.

These excoriations should be dusted with starch powder, or liq. plumb. sac., much diluted with elder-flower or rose water, lightly applied on soft rag, twice or thrice in a day.

Manna, or magnesia, sufficient to act slightly on the bowels.

Rhaghades.

Fissures, often bleeding, on an irritable skin, arising from cold air or water—chiefly in winter.

Wash-leather, or oil-silk gloves; ungt. plumbi; or cold cream.

Condyloina.

An indurated, flattish tumor, at the verge of the anus; usually circular at the edge of the sphincter.

It is caused by irritation of the excretions from the bowels, or of ascarides within the rectum; which, if long applied, will cause the swelling to degenerate into a fissured and bleeding excrescence.

Poultices; or constant tepid ablution, in the early stage. The powder⁽²⁾: castor oil as a laxative; and in weakly children, the mild vegetable tonics.

If the tumour is of long duration, the local applications should be lotio flava; or lot. arg. nitrat.

MACULÆ.

NÆVUS.

Vascular nævus—Mother's mark.

A preternatural increase and free anastomosis of the vascular rete of the skin, or cellular tissue: varicose, or erectile pulsatory swellings.

They are not confined to the external cuticle, but are sometimes extending into the mucons epithelium of the lips or mouth. In some cases these capillaries are widely spread and tortuous, like the legs of a spider; in others, small, granular, defined red tumours; in others, a bluish-red swelling, a congeries of veins; or, a crimson tumour, rapidly rising again when pressure is removed. This last, the erectile tumour, has usually a broad base, and grows slowly, unless it be irritated or bruised, when it may become rapidly enlarged.

When the vessels are large, and near a considerable trunk, (aneurism by anastomosis,) they pulsate powerfully beneath the fingers, and are attended by a thrilling *pur*, synchronous with the heart; and for their removal may require the ligature of the arterial trunk from which the vessels are derived.

The vascular nævus will sometimes spontaneously disappear by absorption, when it is diminutive; and ulceration will occasionally terminate in its spontaneous removal, lymph being effused to close the vessels as the ulcerative process proceeds.

Treatment. Cold lotion; pressure; iodine; ligature; simple puncture; vaccination; caustic; extirpation. If nævi increase rapidly, are seated on parts subject to pressure or contusion, or obstruct muscular action, their removal should be adopted without delay.

In minute and inactive nævi, constant application of cold spring water, or liq. plumb. ac. d. on folded linen; or pressure, by firmly binding down sheet lead on the part, if seated over a bone; or the more speedy mode of extirpation by the knife, the hæmorrhage being stopped by pressure, or argenti nitras.

Extirpation may prove dangerous where the tumour is seated close to a trunk, especially if connected with it by a large artery.

In larger nævi, it will be essential to strangulate the tumour by ligature; or obliterate the cells by adhesive inflammation; or by destroying the tissues with caustic.

If the base of the swelling be narrow, a simple ligature is the easiest mode.

If the base be large, a needle, armed with a double ligature, should be passed under the base of the tumour, and the threads tied around each hemisphere, and tightened as they become loosened by ulceration; or a hare-lip pin may be passed under the nævus;

then a needle and double ligature under that *at right angles*; the needle being withdrawn, the silks are then tied tightly, and twisted round the pin twice or thrice. When the part is killed, it will often be necessary to remove the ligature, especially if great pain be produced, and convulsion seem to be impending; or if the bulk of the tumour be considerable, it will be judicious in two or three days, if the strangulation is complete, to remove it by degrees, or at once, with a scalpel; if this is safely effected, the constitutional symptoms will be usually much relieved.

The tissue of vascular nævi possesses a degree of insensibility which will allow ligatures, extensively applied *perpendicular* to their base, to remain even for months without ulceration; but *absorption* will usually at length ensue.

If the nævus do not exceed the size of a common marble, puncture, vaccination, or caustic may be resorted to.

The puncture may be made by introducing a cataract needle obliquely beneath the skin, and then moving it about so as to destroy the sub-cutaneous tissue, and thus, by the effusion of lymph, obliterate the cells.

It is by this obliteration, too, that vaccination is efficacious; the surface of the nævus must be *studded* with the punctures, that the coalescence of adhesion may completely obliterate the nævous tissue.

The pustulus excited by the ungt. ant. tart. would probably produce a somewhat similar effect.

The caustic should not be applied in the immediate vicinity of delicate organs, as the eye, &c.; and at all times must be used with caution.

Adhesive plaster is applied closely over the nævus, with an orifice less than its circumference. The kali purum is rubbed on till slight discolouration appears; plaster is then tightly pressed on the part, and suffered to remain for some days.

Where the nævus is flat, one of its largest vessels may be punctured; the kali purum finely pointed is passed into the orifice, and vinegar is immediately applied, to stop its escharotic progress, and prevent a scar.

Laxatives should always be administered previous to the operation. The child should be free from fever, and in good health, and it should have attained its third month at least.

As in all other operations, where pain, restlessness, fever, or undue inflammation are produced, it will of course be essential to administer anodynes, laxatives, and diaphoretics, until the ligatures, or other sources of irritation, are removed, or drop off.

When the nævus is a mere stain, it has been proposed to *tattoo* the skin with white lead and cinnabar.

LENTIGO.

Lenticula--Freckles.

From exposure to the sun's rays. Small round spots, or exten-

sive patches of tawny yellow, almost peculiar to fair and florid complexions; the hair being sandy, or auburn. Seldom occurring in parts which are covered.

Treatment.—Defence from the rays of the sun.

Lotions of spt. rect. or liq. potassæ in aq. rosæ.

Nitro-muriatic acid lotion, or the sulphureo-gelatinous bath.

TINGE OF ARGENTI NITRAS.

From the *internal* use of lunar caustic. A cerulean hue gradually deepening to violet, dingy purple, or even a purplish-black; usually commencing about the face, and parts exposed to light; sometimes tinging the sclerotic, and even, though rarely, the tongue and fauces. The hue is lessened by raising the arm; although, as the blood itself is not tinged, this is probably effected by rapid absorption.

The discoloration does not depend on magnitude of dose so much as periods. Two, or at most, three months, should be the limit of its use.

It does not always appear *soon* after the undue employment, but three months, and even three *years* have elapsed ere it has commenced.

It is removable only in a slight degree, by frequent use of the nitro-muriatic acid bath.

FORMULÆ.

PULVERES.

*** The *upper* figures denote the years of age. The *lower*, the number of parcels into which the mass is to be divided.—These doses are adapted to *each* prescription.

I.	III.	VI.
VI.	IV.	II.

1.† *Pulvis Aperiens.*—Hydrarg. subm. gr. iij. : Pulv. jalap. gr. vj. : Rhæi, gr. xij. : Cinnam. gr. x. : Interdum adde pulv. scam. c. ðj. Div.

2. *Pulvis Rhæi Comp.*—Pulv. rhæi, gr. vj. : Cinnam. gr. xij. : Sodæ subcarb. gr. xij. : Hydr. cum cret. gr. x. Div. : o. n. vel 2^{da} n.

3. *Pulvis Potassæ Comp.*—Potassæ sulph. ðj. : Pulv. rhæi, gr. iv. : Ipec. c. gr. v. : Contrayerv. c. gr. xvj. Div. : o. n.

4. *Pulvis Astringens.*—Sodæ subcarb. gr. xij. : Pulv. ipecac. c. gr. iv. : Cretæ c. gr. xvj. : Hydrarg. cum cret. gr. vj. : Interdum adde P. e. cret. c. cum opio, gr. viij. : vel P. e. Kino c. gr. x. Div. : 5 vel 6 horis, cautè.

† These figures are referred to in the directions for treatment.

5. *Pulv. Digitalis Comp.*—Hydr. submur. gr. iv. : Pulv. digitalis, gr. ij. : Jacobi v. gr. vj. : Sacch. alb. gr. xij. : o. n. vel 2^{da} n. Div. : vel bis indies, cautè.

6. *Pulvis Tonic. Veget.*—Pulv. calomb. gr. x. : Quinin. sulph. gr. ijss. : Sodæ subcarb. gr. x. Div. : bis indies.

7. *Pulvis Tonic. Mineral.*—Ferri sulph. exsicc. gr. vij. : Potass. sulph. gr. xij. : Pulv. cascarill. gr. xvj. Div. : bis indies.

MISTURÆ.

* * The upper figures denote the years of age. The lower, the number of dessert spoonfuls appropriate to each.—These doses are adapted to each prescription.

I.	II.	IV.	VI.
I.	II.	III.	VI.

1. *Mistura Carminitiva.*—Magnes. sulphat. ℥ij. : Carbonat. ℥j. : Tr. cardamom. c. ℥ij. : Spt. ætheris c. ℥j. : Ol. anisi, ℥ij. : Syrup. violæ, ℥ijj. : Infus. cinnam. ℥ijss. M. : 2 vel 4 horâ durante dolore.

2. *Mistura Aperiens.*—Magnes. sulphat. ℥ijj. : Subcarb. ℥ss. : Syrup. rhæi, ℥ss. : Aq. distillat. ℥ijj. M.

3. *Mistura Astringens Anodyn.*—Magnes. subcarb. ℥ss. : Cretæ ppt. gr. xxiv. : Spt. ammon. arom. ℥ss. : Tr. Asafœt. ℥ss. : Syrup. papav. ℥ij. : Mucil. acac. ℥ijss. : Interdum adde pulv. cretæ c. cum opio, gr. xij. : vel Tr. catechu, ℥iss. M. : 3, 4, vel 5 horis.

4. *Mistura Alkalin, Anodyn.*—Tr. opii ℥x. : Liq. potass. ℥j. : Spt. myrist. ℥ij. : Syrup. rhæad. ℥ij. : Mucil. acac. ℥ijss. M. : 4 vel 6 horis.

5. *Mistura Tonic.*—Acid. sulphur. arom. ℥j. : Syrup. aurant. ℥ijj. : Infus. cascarill. et calomb. ℥ijss. M. : ter indies.

6. *Mistura Tragacanthæ c.*—Mucil. tragacanth. ℥ijss. : Pulv. potassæ nitr. ℥ss. : Vin. ipecac. ℥xl. : Tr. hyoscyam. ℥xx. : Camphor. C. ℥j. : Oxymel scill. ℥j. : Syrup. tolut. ℥ij. : Interdum adde liq. ant. tart. ℥xx. : vel acid. hydrocyan. ℥iv. M. : 3 vel 4 horis.

7. *Mistura Diaphoretica.*—Liq. ammon. acet. ℥ss. : Antimon. tart. ℥xviij. : Vin. ipec. ℥xx. : Pulv. potassæ nitr. ℥ij. : Tr. digital. ℥xx. : Syrup. limon. ℥ss. M. : 4, 5, vel 6 horis.

8. *Mistura Diaphoret. Anodyn.*—Mist. camphoræ. ℥ij. : Tr. camphor. c. ℥j. : Humuli, ℥j. : Vin. ipec. ℥xl. : Liq. am. acet. ℥v. : Syrup. papav. ℥ij. M. : 4, 5, vel 6 horis.

9. *Mistura Hydriodatis Potass.*—Pot. hydriod. gr. viij. ad xij. : Syrup. aurant. ℥ss. : Aq. flor. aurant. ℥ijss. M. : bis terve indies, cautè.

10. *Mistura Amygdalæ c.*—Emuls. amygd. ℥ijss. : Tr. camphoræ c. ℥ij. : Spt. ætheris nit. ℥ij. : Syrup. tolutan. ℥ijj. M. : 3, 4, vel 5 horis.

LOTIONES.

1. *Lotio Argenti Nitrat.*—Argenti nitr. gr. j. ad iv. : Aquæ ros. ℥j.

2. *Lotio Sedativa.*—Liq. plumb. subac. ℥ij. : Ammon. acet. ℥ij. : Aq. rosæ ℥ijss.

3. *Lotio Astringens.*—Ammon. muriat. ℥j. : Liq. ammon. acet. ℥j. : Aq. flor. sambuc. ℥ivss.

4. *Lotio Acidi Nitrici*.—Acid. nitr. ℥ss. ad ℥j. : Aq. distillat. ℥j.
 5. *Lotio Alkalina*.—Liq. potass. ℥jss. : Aq. flor. samb. ℥j.
 6. *Lotio Flava*.—Hydrarg. oxym. gr. iij. : Liq. calcis, ℥ijss.
 7. *Collyrium Sedativum*.—Liq. plumb. subac. ℥j. : Aq. rosæ, ℥ijss. : tepidè utend.
 8. *Collyrium Astringens*.—Zinci sulph. gr. v. : Vin. opii, ℥xx. : Aq. rosæ, ℥ij.
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1. *Gargarisma Stimulans*.—Tr. capsici a. ℥ss. ad ℥j. : Aluminis, ℥ij. : Mellis, ℥ss. : Aq. pur. ℥iij.
 2. *Gargarisma Commune*.—Mel. boracis, ℥ss. : Tr. myrrhæ, ℥ij. : Acid. sulph. dil. ℥xij. : Mucilag. acac. ℥iij.
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BALNEA.

1. *Baln. Acid. Nitro-muriatic*.—Acid. nitric. ℥iij. : Acid. muriat. ℥j. : Warm water sufficient to reduce the bath to the acidity of distilled vinegar.
2. *Balneum Alkalinum*.—Potass. subcarb. ℥iv. ad ℥viiij. : Aq. cong. xxx.
3. *Balneum Sublimat*.—Hydr. oxymur. ℥ij. ad ℥iv. : Aq. cong. xxx.
4. *Balneum Sulphureo-gelatin*.—Potass. vel sod. sulphuret. ℥ij. ad ℥iv. : Ichthyocoll. ℥ss. : Aq. cong. xxx.





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